# NOAA TECHNICAL MEMORANDUM 



## NMFS-SEFSC-332

## FISHIING TRENDS AND CONDITIONS IN THE SOUTHEAST REGION 1992

Kim Newlin, Editor


Kim Newlin, Editor

Contributors
Ken Harris, Nelson Johnson, Glenwood Montgomery, John Devane, Dick Dumas, Claudia Dennis, Howard Schaefer, Guy Davenport, Josh Bennett, Ed Little, Tom Herbert, Guy Pizzuti, Debbie Fable, Ted Flowers, Gary Rousse, Kathleen Hebert, Linda Picou, Lee Usie, Rene Labadens, Margaret Bourgeios, Billy Tucker, Karen Swank, Wesley Roberts, Margot Hightower, Tom Mauermann, Tom Scott, Roy Spears, Kit Doncaster, Edie Lopez, Beany Slater, Steve Meyers and Daniel Matos.

U. S. DEPARTMENT OF COMMERCE Ronald H. Brown, Secretary<br>National Oceanic and Atmospheric Administration<br>D. James Baker, Administrator<br>National Marine Fisheries Service<br>Nancy Foster, Acting Assistant Administrator for Fisheries<br>Southeast Fisheries Science Center<br>Miami, Florida 33149

August 1993

This Technical Memorandum series is used for documentation and timely communication of preliminary results, interim reports, or similar special-purpose information. Although the memoranda are not subject to complete formal review, editorial control, or detailed editing, they are expected to reflect sound professional work.

## NOTICE

The National Marine Fisheries Service (NMFS) does not approve, recommend or endorse any proprietary product or material mentioned in this publication. No reference shall be made to NMFS, or to this publication furnished by NMFS, in any advertising or sales promotion which would indicate or imply that NMFS approves, recommends, or endorses any proprietary product or proprietary material mentioned herein or which has as its purpose any intent to cause directly or indirectly the advertised product to be used or purchased because of NMFS publication.

This report should be cited as follows:
Newlin, Kim [Editor]. 1993. Fishing trends and conditions in the southeast region 1992. NOAA Technical Memorandum NMFS-SEFSC-332, 88 p.

ABSTRACT: This report provides first-hand information on the fishing trends and conditions in the commercial and recreational fisheries of the southeastern United States during 1992. The information and text were provided by Federal and State fishery reporting specialists that are located in major fishing ports in the region.

Copies may be obtained by writing:

Mr. Kim Newlin<br>National Marine Fisheries Service<br>Southeast Fisheries Science Center 75 Virginia Beach Drive<br>Miami, FL 33149

National Technical Information Service 5258 Port Royal Road Springfield, VA 22161

## PREFACE

This report provides first-hand information on the trends and conditions in the commercial and recreational fisheries of the southeastern United States during 1992. The information and text are by Federal and State fishery reporting specialists that are located in major fishing ports in the region. The statements on trends and conditions in this report are based on anecdotal information and do not represent analyzed data. The report also includes preliminary data on the commercial and recreational fishery landings for 1992.

The Southeast Fisheries Science Center gratefully acknowledges the exemplary work of the fishery reporting specialists in collecting fishery statistics for conservation and management purposes. These individuals are the NMFS's liaison with rank-andfile fishermen and seafood dealers. Their willingness to work with the industry and their efforts in collecting the data necessary for a better understanding of the fishery are greatly appreciated.

## CONTENTS

Page
1992 Fishing Trends and Conditions in the Southeast Region ..... 1
Southeast Regional Summary ..... 1
North Carolina ..... 4
South Carolina ..... 5
Georgia ..... 6
Florida ..... 7
Alabama ..... 24
Mississippi ..... 26
Louisiana ..... 27
Texas ..... 37
Puerto Rico ..... 42
Virgin Islands ..... 43
1992 Reported Landings for the Southeast Region ..... 45
1992 Reported Landings for the South Atlantic Region ..... 65
1992 Reported Landings for the Gulf Region ..... 68
1992 Statistical Highlights for the Southeast Region ..... 71
1992 Reported Landings for Puerto Rico ..... 73
1992 Reported Landings for the United States ..... 74
1992 Statistical Highlights for the United States ..... 79
1991 Estimated number of commercial fishing vessels and boats ..... 82
1992 U. S. Marine Recreational Fisheries ..... 83
Please address all comments or questions to:
Research Management Division
Southeast Fisheries Science CenterNational Marine Fisheries Service75 Virginia Beach DriveMiami, Florida 33149

## 1992 FISHING TRENDS AND CONDITIONS IN THE SOUTHEAST REGION

This report contains information on conditions and developments in the fishing industries in the southeastern United States during 1992. The landings and value data in the report are preliminary and subject to change.

## Southeast Regional Summary

Commercial landings of fish and shellfish in the southeastern region of the United States in 1992 decreased 342.6 million pounds ( $17 \%$ ) from 1991. This was mainly due to a reduction in menhaden catch of 270.8 million pounds. The 1992 exvessel value of the total landings was $\$ 785.6$ million, down $3 \%$ from 1991. Louisiana led the other southeast states with total landings of 978.5 million pounds valued at $\$ 276.4$ million. Louisiana this year had the highest shrimp landings ( 97.4 million pounds) worth $\$ 144.6$ million in ex-vessel value.
The most valuable fishery was the shrimp fishery with 246.8 million pounds and an ex-vessel value of $\$ 440.2$ million. Overall, shrimp landings were down $7 \%$ and value was down $8 \%$ from 1991. It should be noted, however, two areas increased their shrimp landings. Florida West coast shrimp landings increased $42 \%$ and Louisiana landings increased $2 \%$.

As in past years, menhaden led other species with 856.1 million pounds landed. The fishery with the most dramatic increase in landings was the shark fishery with a $100 \%$ increase in landings(to 19,286 million pounds) with a value of $\$ 5.9$ million( a $49 \%$ increase). The next most dramatic increase in poundage was in the tuna fishery whose landings increased $53 \%$ (to 12.3 million pounds) and whose value increased $28 \%$ (to $\$ 25.7$ million). The next largest increase in landings was the oyster fishery whose landings increased $40 \%$ (to 19.5 million pounds) and whose value increased $20 \%$ to $\$ 44.7$ million. The sharpest decline was in Spanish mackerel landings which were down $51 \%$ to 3.3 million pounds. The 1992 menhaden landings were down for the second year in a row, $24 \%$ by weight, but up $27 \%$ in ex-vessel value to $\$ 43.5$ million. Spiny lobster and stone crab landings were down $38 \%$ and $25 \%$, respectively. North Carolina recorded the largest percentage decrease in landings in $1992(28 \%)$ and a corresponding decrease in value of $\$ 9.3$ million, or approximately $14 \%$. Georgia recorded the largest percentage increase in landings of $10 \%$ but had an overall decrease in value of $3 \%$.

Recreational landings of fish in the southeastern region of the United States in

1992 increased from 1991. The increase from 78.9 to 85.9 million pounds was $8.9 \%$. The primary species caught were spotted seatrout, scaled sardine, pinfish, hardhead catfish, red drum, Atlantic croaker, sheepshead, white grunt, gray snapper, Spanish mackerel, striped mullet, black sea bass, spot, crevalle jack, sand seatrout, ladyfish, bluefish and red grouper. The Gulf led the Southeast with 133.3 million fish of the 187.2 million fish caught.

Table 1. Change in the preliminary commercial landings and values of fish and shellfish in the southeastern states from 1991 to 1992.

| STATE | 1992 |  | CHANGE (1991 to 1992) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | THOUSAND POUNDS | THOUSAND DOLLARS | THOUSAND POUNDS | THOUSAND DOLLARS | POUNDS $\%$ | $\begin{gathered} \text { DOLLARS } \\ \% \end{gathered}$ |
| NC | 154,035 | \$57,458 | $(58,574)$ | (\$9,289) | (28) | (14) |
| SC | 19,272 | \$25,621 | 134 | (\$2,913) | 1 | (10) |
| GA | 17,620 | \$22,957 | 1,633 | (\$762) | 10 | (3) |
| FL-EC | 46,793 | \$46,001 | 1,415 | $(\$ 3,873)$ | 3 | (8) |
| S.A. REGION | 237,720 | \$152,037 | $(55,392)$ | (\$16,837) | (19) | (10) |
| FL-WC | 105,376 | \$108,888 | (11,977) | (\$3,294) | (10) | (3) |
| AL | 23,689 | \$35,566 | 1,782 | (\$1,131) | 8 | (3) |
| MS | 187,634 | \$31,348 | $(50,754)$ | (\$2,949) | (21) | (9) |
| LA | 978,513 | \$276,431 | $(214,026)$ | \$32,831 | (18) | 13 |
| TX | 96,125 | \$181,353 | $(12,190)$ | (\$33,057) | (11) | (15) |
| GULF REGION | 1,391,337 | \$633,586 | $(287,165)$ | $(\$ 7,600)$ | (17) | (3) |
| S. E. REGION | 1,629,057 | \$785,623 | $(342,557)$ | (\$24,437) | (17) | (3) |

Note: ( ) indicates a pound, dollar or percentage decrease when compared to 1991.

Table 2. Change in the preliminary commercial landings and values of fish and shellfish species in the southeastern region of the United States from 1991 to 1992.

| SPECIES | 1992 |  | CHANGE (1991 to 1992) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | THOUSAND POUNDS | THOUSAND DOLLARS | THOUSAND POUNDS | D THOUSAND DOLLARS | $\begin{gathered} \text { POUNDS } \\ \% \end{gathered}$ | $\begin{gathered} \text { DOLILARS } \\ \frac{\%}{\circ} \end{gathered}$ |
| GROUPERS | 10,992 | \$21,574 | 254 | \$1,750 | 2 | 9 |
| SNAPPERS | 9,420 | \$17,959 | 443 | \$1,549 | 5 | 9 |
| KING MACKEREL | 4,455 | \$5,684 | 195 | \$597 | 5 | 12 |
| SPANISH MACKER | EL 3,311 | \$932 | $(3,402)$ | (\$2,425) | (51) | (72) |
| MENHADEN | 856,062 | \$43,516 | $(270,782)$ | \$9,241 | (24) | 27 |
| SHARKS | 19,286 | \$5,915 | 9,620 | \$1,941 | 100 | 49 |
| SWORDFISH | 3,097 | \$11,326 | (719) | (\$2,234) | (19) | (16) |
| TUNA | 12,278 | \$25,682 | 4,243 | \$5,570 | 53 | 28 |
| OYSTERS | 19,490 | \$44,668 | 5,548 | \$7,300 | 40 | 20 |
| SHRIMP | 246,771 | \$440,229 | $(18,739)$ | (\$38,140) | (7) | (8) |
| SPINY LOBSTER | 3,951 | \$14,611 | $(2,394)$ | (\$12,935) | (38) | (47) |
| STONE CRAB | 4,756 | \$10,809 | $(1,549)$ | $(\$ 2,813)$ | (25) | (21) |

Note: Landings of fish, lobster and shrimp in live weight; oysters in meat weight.
( ) indicates a pound, dollar or percentage decrease when compared to 1991.

Table 3. Change in the preliminary commercial landings and value of shrimp in the southeastern states from 1991 to 1992.

| STATE | 1992 |  | CHANGE (1991 to 1992) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | THOUSAND POUNDS | THOUSAND DOLLARS | THOUSAND POUNDS | thousand DOLLARS | PERCENT POUNDS | CHANGE DOLLARS |
| NC | 5,155 | \$10,237 | $(5,587)$ | ( $\$ 8,351$ ) | (52) | (45) |
| SC | 7,157 | \$14,527 | $(1,980)$ | $(\$ 2,254)$ | (22) | (13) |
| GA | 7,605 | \$18,554 | (950) | (\$1,632) | (11) | (8) |
| FL-EC | 4,788 | \$ 8,064 | $(3,405)$ | $(\$ 4,086)$ | (42) | (34) |
| S.A. REGION | 24,705 | \$51,382 | $(11,922)$ | $(\$ 16,323)$ | (33) | (24) |
| FL-WC | 15,948 | \$27,042 | 4,692 | \$11,368 | 42 | 73 |
| AL | 13,499 | \$30,180 | $(1,437)$ | $(\$ 2,596)$ | (10) | (8) |
| MS | 10,150 | \$19,839 | $(1,631)$ | (\$666) | (14) | (3) |
| LA | 97,401 | \$144,552 | 2,313 | \$3,091 | 2 | 2 |
| TX | 85,068 | \$167,234 | $(10,754)$ | $(\$ 33,014)$ | (11) | (16) |
| gulf region | 222,066 | \$388,847 | $(6,817)$ | $(\$ 21,817)$ | (3) | (5) |
| S. E. REGION | 246,771 | \$440,229 | $(18,739)$ | \$38,140 | (7) | (8) |

Note: Shrimp landings in heads-on weight.
( ) indicates a pound, dollar, or percentage decrease when compared to 1991.

## NORTH CAROLINA

## Total Landings:

Commercial landings for 1992 totaled 154 million pounds with an ex-vessel value of 57.5 million dollars. Landings were $28 \%$ lower than in 1991. Average ex-vessel prices were down 14\% for 1992.

## Edible Finfish:

Total edible finfish landings were down $4 \%$. Average ex-vessel prices decreased $9 \%$. Landings increased for dogfish ( $490 \%$ ), grouper ( $25 \%$ ), sea bass ( $12 \%$ ), bigeye tuna ( $157 \%$ ) and mullet ( $24 \%$ ). Decreased landings were reported for flounder ( $26 \%$ ), bluefish ( $28 \%$ ), croaker ( $19 \%$ ), spotted seatrout ( $20 \%$ ), snappers ( $44 \%$ ), and gray seatrout ( $8 \%$ ). Ocean landings were down $34 \%$. Pamlico Sound landings were down $25 \%$. The water bodies in North Carolina that showed increased landings were Bay River ( $22 \%$ ), Masonboro Sound (18\%), Pasquotank River ( $83 \%$ ), and Roanoke River ( $46 \%$ ). Decreased landings of edible finfish were reported for long hauls ( $37 \%$ ), haul seines ( $27 \%$ ), scallop trawls ( $88 \%$ ), and shrimp trawls ( $51 \%$ ). The gears that reported
increased landings were gillnets (50\%), shark longlines ( $264 \%$ ), and bottom longlines (56\%).

## Industrial Finfish:

Total industrial finfish landings were $46 \%$ lower than in 1991. This decrease was due mainly to a sharp drop in menhaden landings. Average ex-vessel prices remained unchanged.

## Crabs:

Hard blue crab landings were $2 \%$ lower than in 1991, which was a record year. Average ex-vessel prices increased $36 \%$.

## Clams:

Clam landings were down $27 \%$ from 1991. Average ex-vessel prices were unchanged.

## Scallops:

Bay scallop landings were down $51 \%$. Average ex-vessel prices of bay scallops increased $10 \%$. Sea scallop landings were down $36 \%$. Sea scallop ex-vessel prices averaged $22 \%$ higher than in 1991. No calico scallops were landed in 1992.

## Shrimp:

Shrimp landings were $52 \%$ lower than in 1991. Average ex-vessel prices increased $18 \%$. The species composition was $50 \%$ brown shrimp (down $62 \%$ from 1991), $36 \%$ pink shrimp (down $28 \%$ from 1991) and $14 \%$ white shrimp (down $47 \%$ form 1991).

## Oysters:

Oyster landings increased $8 \%$ for the year. Average ex-vessel prices for oysters were down 6\% from 1991.

## SOUTH CAROLINA

## Total Landings:

Preliminary commercial landings of finfish and shellfish for 1992 were 19.3 million pounds, down $1 \%$ from the 19.1 million pounds landed during 1991. There were
significant decreases in the landings of swordfish, reef fish and shrimp. Increases in landings were recorded for mullet, spot, sharks and crabs.

## Shrimp:

Landings of shrimp were 7.2 million pounds, down $22 \%$ from the 9.1 million pounds landed during 1991. A very poor brown shrimp crop contributed significantly to the decrease.

## Crabs:

Hard blue crab landings were the highest since 1989. Landings were 7.1 million pounds, up $39 \%$ from the 5.1 million pounds landed during 1991.

## Clams and Oysters:

Landings of clams were down $29 \%$ and oysters were down $8 \%$ from the 1991 landings. A weak northern market and bed closures due to water quality problems were the main factors affecting oyster landings.

## Finfish:

Overall finfish production was down $2 \%$ from that of 1991. Swordfish landings were down $29 \%$; reef fish production was down $11 \%$; mullet and spot increased $190 \%$ and $377 \%$, respectively; and shark landings increased $411 \%$.

## GEORGIA

## General:

As during the spring of 1991, this area of the Atlantic Coast received several inches of heavy rain and sustained high winds. Total seafood harvests were $10 \%$ higher than in 1991, and the second best harvest since 1975.

## Shrimp:

Total landings for 1992 were $11 \%$ lower than 1991, even though the January 1992 landings were $12 \%$ higher than 1991 . White shrimp continue to be the primary species. The rock shrimp harvest increased $31 \%$, while pink, brown, and bait shrimp harvests were well below those of recent years.

## Crabs:

Blue crab landings increased for the third year - up $18 \%$ from 1991. The value of blue crab landing increased $30 \%$, partially due to the scarcity of blue crabs in other areas.

## Finfish:

Wreckfish landings in Georgia were 20 thousand pounds of the 1.2 million pounds landed along the Atlantic Coast in 1992. This was an increase in Georgia's production of $16 \%$. Total landings of offshore demersal fish decreased $35 \%$, partly due to unfavorable weather patterns and a reduction in the number of vessels offloading in Georgia. Pelagic fish landings increased $2 \%$, as the shark fishery developed.

## Sturgeon:

Landings of this historically important species increased $20 \%$, but due to the low catch per unit of effort over the past three years, many netters turned to other species. The current lack of interest in catching sturgeon may favor its recovery.

## Clams, Oysters and Whelks:

Clam and oyster landings continued to increase in 1992, but whelk landings decreased.

## FLORIDA

## DUVAL - BREVARD COUNTIES

## Shrimp:

Shrimping in northeast Florida remained relatively stable in comparison with 1991. A total of 4.1 million pounds (up $2 \%$ ) of mixed tails were landed. White and brown shrimp landings decreased $12 \%$ and $25 \%$, respectively. Landings of pink and rock shrimp registered increases; $12 \%$ for pink tails and $23 \%$ for rock tails. Royal red shrimp landings dropped $16 \%$. The number of trips declined in all counties except Brevard. Duval County experienced the largest decrease in trips, down 573 (18\%). However, Duval's total landings were down only 70 thousand pounds ( $6 \%$ ).

Brown shrimp showed a large decrease in landings. This in part may be attributed to an early start to the rock shrimp fishery and a late start to the brown shrimp fishery.

Typically, shrimp vessels trawl for brown shrimp in May-September and the rock shrimp season normally begins in August. July had over 200 thousand pounds of rock shrimp tails landed. The brown shrimp season started late as significant landings were not recorded until June.

The rock shrimp fishery had high hopes during the summer as landings looked great. The fishermen thought the worrying about the poor 1991 season was for naught and that the rock shrimp fishery was back to normal. Unfortunately, the rock shrimp landings fizzled out by early October and the shrimp vessels landed only approximately 2 million pounds of rock shrimp tails, up only 400 thousand pounds from 1991.

## Fish:

## Wreckfish:

The wreckfish fishery underwent some major changes in 1992 due to the ITQs (Individual Transferable Quotas). The season started April 16 and closed January 14, 1993. Northeast Florida had 119 trips and landed over 500 thousand pounds (gutted weight), a decrease of $42 \%$ from 1991. Duval County showed a substantial decrease in landings ( $85 \%$ ) while Volusia County registered a $15 \%$ increase in landings. The number of vessels decreased from 32 in 1991 to 15 in 1992. Trips varied throughout the season from under 1 thousand pounds to 13 thousand pounds; only four trips were over 10 thousand pounds. Weather, currents, and tides were limiting factors during 1992.

## Hook \& line bottom fishery:

The number of vessels fishing full time in the snapper/grouper fishery declined. The majority of the vessels have diversified to ensure an entry in any of the potential "quota" fisheries. Vessels participating in the snapper/grouper complex do so when their target species catches decline or upon season closures. The snapper/grouper catches continue to be well mixed.

The king mackerel hook and line fleet had a poor year in 1992. "Dirty" water and adverse weather continuously hampered fishing efforts. King mackerel landings declined $23 \%$ in this area. The largest decrease was experienced in St. Johns County, as boats did not fish in that county during June and July as they had in 1991, Brevard County's landings declined $20 \%$ from 1991.

The tilefish fishery remained stable with just a few vessels entering the fishery. Fishing effort decreased as windy weather and strong currents deterred fishermen. The shark longline fishery encountered many newcomers jumping on the bandwagon as the price
of shark fins went sky high. Shark landings are estimated to be over 1 million pounds for 1992.

## Scallops:

The scallop plant at the Cape reopened in October. Seven vessels fished the remainder of the year and produced over 21 thousand gallons of calico scallop meats. The scallops were quite small, count size varied from 180 to $230 / \mathrm{gal}$.

## INDIAN RIVER - PALM BEACH COUNTIES

## Coastal Pelagics:

The 1992 king mackerel landings declined for the third straight year. Slower than normal landings in May, combined with poor weather at the end of 1992, were contributing factors. Catches in 1992 were again made predominantly with hook and line gear, with no targeted gillnet production.

Spanish mackerel landings remained stable, controlled mostly by weather, trip limits and quotas. The roller rigs fished without limits in December, landing over 400 thousand pounds per day on good days. About $90 \%$ of all Spanish mackerel production was gillnet-caught in the winter for an ex-vessel price of $\$ 0.30 / \mathrm{lb}$, a price which remained unchanged from the past several years.

Cobia landings increased $81 \%$ from 1991, seemingly unaffected by the two-fish bag limit per person for commercial and recreational fishermen. Fishermen reported seeing numerous schools of cobia in the spring of 1992.

## Reef fish:

Combined grouper and snapper landings increased 17\% from 1991. Gag landings increased $85 \%$, helped primarily by a larger than normal influx of winter spawning schools. Grouper fishermen reported some of the best fishing seen in over five years. Combined snapper landings increased slightly, but mutton and vermilion snapper landings declined, possibly partly as a result of the January 1992 fish trap ban.

## Amberjack:

Amberjack landings more than doubled from 1991 despite an April spawning closure in the EEZ. Increased effort and better reporting of amberjack landings accounted for this
large increase. Catch rates remained similar to 1991, but the number of boats within this seasonal amberjack fishery continued to increase.

## Longline:

Swordfish landings fell $10 \%$, but tuna landings increased $51 \%$. With strong ex-vessel prices and a high demand for tuna, more consideration is being put on tuna in regard to fishing areas. Swordfish size limits continued to be a sore point with dealers and fishermen. Tilefish landings remained unchanged, but effort and the amount of gear has increased in the past several years. Shark longline landings and effort increased. Several of the roller rigs switched from shark drift nets to longlines during the summer.

## Net fishing:

Combined ocean gillnet landings declined slightly with noticeable declines in bluefish, pompano, and shark net landings. Some inshore species, including menhaden, mullet, and mojarra increased while others, such as spot, declined. The 600 -yard gillnet limit imposed by Florida last year seemed to have little effect on landings. Purse seine effort and landings increased with the addition of a large seiner working the Ft. Pierce area all summer. Bait fish landings, including thread herring, Spanish sardines, and scad all increased dramatically.

## Shellfish:

Blue crab landings increased $28 \%$ from 1991. Spiny lobster landings remained about the same as in 1991. Hard clam production was $37 \%$ higher than in 1991.

## BROWARD AND DADE COUNTIES

## Swordfish:

Swordfish vessels made good swordfish catches in the Windward Passage between Cuba and Haiti, as well as in the Yucatan Channel. The smaller vessels (now less than 10 in number) continue to make a living from swordfish catches in the Florida Straits. Preliminary landings show swordfish production to be down about $20 \%$ from 1991.

## Reef Fish:

Reef fish production was down about $29 \%$ from 1991, probably due to the ban on fish traps in 1992 along the Florida Atlantic Coast. Although a few dealers still handle trap
fish, these are fish trucked up from the Florida Keys. Another cause for the reduction is that some of the reef fish trappers are now selling to dealers in the Keys (Monroe County) instead. Amberjack production in Dade was only half that of 1991. This was primarily due to the May amberjack closure, which has traditionally been the time of peak amberjack fishing.

## Coastal Pelagics:

King mackerel production was down $25 \%$ from 1991. Dolphin fish production declined sharply, with landings only $35 \%$ of 1991 . Bag limits of ten fish per person may have contributed to this decline, since much of the dolphin are sold to dealers by weekend fishermen. There is also the feeling that more of these landings may be going unreported due to fishermen bypassing the dealers and selling directly to restaurants.

## Spiny Lobster and Stone Crabs:

Spiny lobster production was down $45 \%$ from 1991. Many fishermen in Dade lost their traps due to Hurricane Andrew. Some lost their boats as well. Many fishermen have applied for relief loans from the Small Business Administration (SBA). By the time most fishermen had recovered, the peak of the season had passed. Stone crab production was up for Dade dealers, but most of the catch was coming from the west coast of Florida.

## Sponges:

Sponge production suffered slightly due to restrictions on sponging in Biscayne Bay which were instituted in 1992. Sponge landings were down about $15 \%$.

## Other:

Ballyhoo production was down $48 \%$, due mainly to the elimination of purse seining in Biscayne Bay in 1992.

## MONROE COUNTY

## Weather:

The 1992 January weather was generally milder than expected. On February 5, a strong front hit with winds up to 30 mph causing severe loss of lobster traps and rendering local waters very turbid. March and April sustained gusty winds with rough seas that limited many types of fishing. A strong cold front arrived April 30th with temperatures down
to the low 50s.
Summer weather conditions were generally favorable to most kinds of fishing until August 24 when Hurricane Andrew hit South Florida. All local craft ceased operations to prepare for the storm and for almost a week afterwards. Logistical snarls prevented Keys dealers from transporting product to the few buyers still operational in Miami. Although the hurricane did severe damage to some dealers and fishing operations in the extreme upper Keys, most fishing interests in Monroe County escaped unscathed by Hurricane Andrew.

Autumn and winter weather was favorable for most types of fishing. A tropical wave passed on September 10, and the first cold front of the season hit on October 5. Although seas were often rough, November and December were memorable for the general paucity of cold fronts.

## Environment and Marine Ecology:

The fishery trends of 1992 need to be evaluated with reference to continued reports of environmental degradation to the marine ecosystem of the Keys and to changing socioeconomic factors. Various agencies and environmental groups attributed the massive seagrass die-offs, algal blooms, and other severe problems in Florida Bay to reductions in fresh water flows from the Everglades. Potential remedies included proposed construction of vast "man-made marshes" to restore water quality. The reef environment seems imperiled by continued widespread coral deaths, smothering by vast mats of nuisance benthic algae, and nutrient loading.

The Florida Keys National Marine Sanctuary is seeking support and involvement from the public. A citizen's advisory committee has been formed to review Sanctuary plans, and there has been widespread consensus that improving the water quality should be the first priority. However, when unveiled in November 1992, Sanctuary zoning proposals which would limit fishing in some areas provoked increased opposition by fishermen and others who had already opposed some of the Sanctuary's earlier proposed management measures. These proposals have caused some fishermen to fear for their economic future and to feel threatened even by routine NMFS data gathering programs.

## Shrimp:

During 1992, shrimp catches were below normal during the peak winter season with fewer boats working the shrimp grounds. During the April through August "off-season," the handful of shrimp boats that stayed did especially well, catching "large" shrimp and earning upwards of $\$ 1,000$ per night each. From then on catch rates remained "spotty"
until late December. Ex-vessel prices were soft the first half of the year and were followed by a general downward trend. Later, prices climbed to more profitable levels. Shrimpers reported problems with TEDs due to the increased numbers of stone crab traps being set on "traditional" offshore shrimping grounds.

## Coastal Pelagics:

King mackerel catch per unit effort and total landings for each user group were up in 1992 compared to recent years. By the January 9 closure, approximately 350 thousand pounds of king mackerel had been landed in two days of fishing by the ten roller rig gillnet boats. The king mackerel handline fleet enjoyed good catches as well as the private, charter boats working Florida waters. On April 1 the commercial trollers (and one net boat) sought king mackerel off the Dry Tortugas. Although troll catch rates were often very high, the fish left the area after a warm front hit on April 2. It was not until mid-December that the fishery resumed in earnest. At that time, scores of boats trolled the Gulf northwest of Marquesas in attempts to recoup losses suffered as a result of the poor spiny lobster season. By December 31 they had landed more than 300 thousand pounds of king mackerel. For most of the year ex-vessel prices for king mackerel were soft and seldom exceeded $\$ 0.75 / \mathrm{lb}$ (gutted weight) for catches landed in quantity.

Early in 1992, the Spanish mackerel gillnet fishery operated far below its historical potential, despite the effort of several boats from the Florida east coast. Lower demand and low ex-vessel prices ( $\$ 0.30 / \mathrm{lb}$ ) were the main reasons. Adverse weather (mostly as a result of the February 5 storm) and the depredations of vast schools of sharks hindered crews from finding and striking mackerel. For similar reasons, when the Spanish mackerel returned to the area in December, few boats actively pursued them.

The dolphin fish fishery operated on a lesser scale than in previous years. The market had already been flooded with cheap imports when the dolphin arrived. The fish stayed so far offshore that few crews targeted them during the early summer "off season" because of the trap fisheries.

## Spiny Lobster:

The spiny lobster industry in 1992 suffered a second straight year of lower catches. The only exception was the continued high production of lobster from the grounds off the Dry Tortugas. Spiny lobster catches there showed upswings in February and September. Most fishermen blamed the degradation of Florida Bay and lobster migrations induced by Hurricane Andrew for the abnormal declines. Although ex-vessel prices were high at the start of the year, they dropped back to very low levels when the spiny lobster season reopened in August. The initial low lobster price caused the crews to strike, and
the dealers, despite citing weak domestic and overseas markets, raised ex-vessel prices by $\$ 0.75 / \mathrm{lb}$, so that most live catches sold for $\$ 3.50 / \mathrm{lb}$.

Florida agencies proposed closing extensive areas off Key Largo to both commercial and sports spring lobster harvests. Fishermen received notice that in accord with Florida's trap reduction plan, they likely would be allowed far fewer spiny lobster traps than they were accustomed to fishing. This situation, and the prospect of being barred from fishing in the Florida Keys National Marine Sanctuary "no-take zones," continue to upset many fishermen. As for the sports lobster fishery, in an effort to lessen the impact of the special "mini-season," Florida switched the dates to mid-week (but weekend dates for EEZ waters remained as before) and increased the bag limit only for those lobster harvested in Dade County. The measure did seem to reduce the number divers visiting. the Keys, but the Florida Marine Patrol handed out 189 citations and 421 warnings for the two-day event.

## Stone Crabs:

The stone crab fishery generally had lower catches for most of 1992. Early in the year, fishermen said landings were down owing to the mild winter. Then, when the stone crab season reopened in October, catches soon proved to be less than expected. As a result, ex-vessel prices increased $\$ 0.25 / \mathrm{lb}$ across all grades.

## Fish:

The most significant event with regard to reef fish was Amendment 4 to the South Atlantic Council's Snapper Grouper Plan. The new Plan called for commercial permits, stricter size/bag limits, and a ban on all fish traps. This caused a shifting of trap effort to BEZ Gulf waters, where fish traps are still legal. The handliners targeted yellowtail snapper, glutting markets and depressing ex-vessel prices during the spring peaks of spawning, effort, and catches. Catches of gray snapper proved to be less than anticipated. Fishermen reported that gray snapper never really underwent the June-July spawning "bite", despite large schools being seen on the reefs. Mutton snapper that gathered on Riley's Hump southwest of the Dry Tortugas to spawn yielded high catches to fish trappers and bottom longliners during June. The transient shark longline boats which operate the Keys in the autumn and winter were effectively barred from targeting sharks in Florida waters in April.

## Recreational Fisheries:

In 1992 recreational fisheries had both ups and downs. The numbers of the charter fleet and private boats were swelled by additional craft. Yet, the domestic recession and the
aftermath of Hurricane Andrew undoubtedly lowered the overall number of people participating in recreational fishing trips. Still, most sources reported good fishing offshore and inshore, and a continued upsurge in the ethic of catch and release fishing.

## COLLIER TO PINELLAS/MANATEE COUNTIES

## Weather:

Highlights for 1992 included mostly very dry conditions except during the summer rainy season. Strong gale storms occurred in February and October. This area had no major problems with Hurricane Andrew, which hit mainly to the south of the area in late August.

## Shrimp:

1992 was yet another depressed year for the local shrimp fishery, although shrimp landings did begin to improve by the end of the year. Total shrimp landings for 1992 were 1.7 million pounds, up $6 \%$ from 1991, but still the fourth lowest year on record. Total trips were 931 in 1992 compared to 916 in 1991. Shrimp catches were up at the beginning of the year, because of a strong recruitment of smaller shrimp, but fell steadily through the remainder of the 1991-92 season. This had many shrimp vessels ceasing fishing or leaving the area by early June for Texas. However, many vessels returned early to Florida due to the poor Texas shrimp season. Good catches in November-December helped the industry to recover from otherwise poor shrimp seasons on both sides of the Gulf.

In August, Hurricane Andrew did not produce the hoped-for dramatic surge in shrimp landings that Donna, the last major hurricane, had produced in 1960. This was probabiy due to the fairly small area affected by the path of the storm, and the compact area in which winds were of hurricane force.

Pink shrimp, with unusual pepper-like black dots on the carapace, were being caught on local grounds and this caused some concern among shrimpers. Other unusual reports included an increase in the incidence of "cancer" shrimp (hard, black growth) and "cotton" shrimp (white, cooked appearance) in the catches. There were reports of "Contoy" shrimp ( $\mathbf{P}$. brasiliensis) showing up in deeper water on the Dry Tortugas grounds. A few vessels fished for royal red shrimp and sold them to buyers on Florida's upper east coast. Bay shrimp landings from Charlotte Harbor remained low due to fewer craft fishing as a result of increasing Federal (TED) and state regulations. The practice continued of most shrimp landings in this area being "peddled," thus bypassing many
wholesale shrimp dealers. Some dealers complained these landings were not being recorded on Florida trip tickets.

Most area shrimpers settled into using either a modified version of the Andrews TED or a Parish TED, both similar soft-type TEDs. Resigned acceptance of TEDs became more and more the prevalent attitude, even to including some praise of them for their bycatch reduction, but there were still numerous protests and grumblings.

Shrimp prices fluctuated throughout the year. Prices ended the year mostly within $10 \%$ of those at the start of the year, except for $71 / 80$ s and smaller "tails," which were down sharply in price by 22 to $40 \%$.

## Fish:

Traditional "mullet-skiff" gillnet fishermen continued to fish under ever-increasing pressure for their restriction or elimination, as recreational groups collected signatures on a net ban petition. Mounting Florida state restrictions and proposed regulations had fishermen and dealers from all over the area attending a variety of meetings and public hearings to make sure their sides were heard. A proposal to close mullet fishing for half of the roe season each year was at least temporarily stopped due to a legal challenge by commercial groups.

Although the 1991-92 roe-mullet season ended on the downside, it was followed by a scarcity of mullet in the spring, driving prices as high as $\$ 0.45 / \mathrm{lb}$. Strong roe-mullet catches prevailed through the summer to the start of the 1992-93 roe season. The 199293 roe season started in late October with roe yields higher earlier than usual but then slowing in November. Mullet landings were quite strong by December, with prices reaching $\$ 1.80 / \mathrm{lb}$ for roe mullet. Net fishermen continued to fish for pompano, sheepshead, jacks, whiting, bait fish, and some mackerel when not mullet-fishing. There was only a very small amount of spotted seatrout fishing, as trammel nets have become fairly scarce. Bait fish purse seiners fished mostly for thread herring and not the restricted Spanish sardines. Mounting pressure continued for still more regulations on purse-seiners who were accused of being responsible for decreased bait fish populations and resulting declines in pelican populations.

Mackerel landings continue to increase. There were brief periods of gillnetting for Spanish mackerel during the spring and fall runs. Prices ranged from $\$ 0.20$ to $\$ 0.75 / \mathrm{lb}$ due to fluctuating market demand. There was a short period of king mackerel landings, caught mostly by a few trollers and hook-and-liners. Prices for king mackerel ranged from $\$ 0.90$ to as high as $\$ 2.75 / \mathrm{lb}$. Overall, landings and targeting of mackerel remained relatively modest in 1992, because only a few fishermen were willing to gear up for them
during these brief runs.
Reef fish landings, mainly groupers, appeared to continue on a somewhat downward trend in 1992. This was in part due to fewer vessels and the effect of increasing regulations on reef fish in the Gulf. Grouper fishing remained open throughout 1992 since the quotas were never met. Red grouper continued to be the main catch, but a fair amount of deep-water reef fish were landed. Prices on groupers were erratic due to seasonal demand and import pressure. A big drop in prices in late spring/early summer recovered by July. The Collier County fishery, mostly in the summer, was made up largely of fish trappers, many of whom eventually switched to stone crab trapping during that season. Traps remained the main reef fish gear, with "bandit" hook-and-line gear being the prevailing gear in Lee county, and longlining the main gear type in Charlotte County and northward. The red snapper closures had little effect in this area, where red snapper is a small bycatch. Fishermen complained that the red snapper closure was not necessary in the southern Gulf. Longliners put a proposal before the Gulf Council to move the minimum longlining depth inshore to 15 fathoms from its current 20 fathoms.

There were a fair number of swordfish longliners working out of Collier County (Naples), many of whom worked the Dry Tortugas elbow and the Gulf. Some of these sold much of their catches to Florida east coast dealers, but an increased amount of swordfish went through Naples in 1992. Vessels that used to work out of Manatee County either went elsewhere or switched to reef fish longlining. Swordfish prices were high during the first part of 1992 , up to $\$ 6.50 / \mathrm{lb}$ for markers(over 100 lbs ) with a $\$ 5.00$ $\$ 5.50 / \mathrm{l}$ overall average. There was only a small amount of shark longlining.

Crabs:
The stone crab fishery was generally stable overall, as it has been for many years. Catches were somewhat erratic during the latter half of the 1991-92 season, as prices increased to as high as $\$ 4.75 / \mathrm{lb}$ for medium claws and to $\$ 7.50 / \mathrm{lb}$ for jumbo size claws. A smaller average size of stone crab claw was noted by the latter part of the 1991-92 season. The 1991-92 season was called "average" overall. The 1992-93 season experienced the usual strong catches at the opening of the season in October, but there was no problem with an opening glut as there was in 1991, so prices rose by the end of October. Catches remained average to a little below average for the rest of the stone crab season.

The blue crab fishery was fairly stable in 1992, with landings steadily improving and prices generally falling throughout the year. Prices ranged from $\$ 0.40-\$ 0.90 / \mathrm{lb}$, averaging $\$ 0.50-\$ 0.65 / \mathrm{lb}$. A new, comprehensive set of state regulations is being prepared for the blue crab fishery.

## Lobster:

Hurricane Andrew lowered spiny lobster prices at the start of the 1992-93 season due to disabled buyers in Miami and other areas, but prices soon recovered. There were only a few lobster trappers in Collier County again this year.

## PINELLAS - WAKULLA COUNTIES

## Weather:

1992 produced an unusually rough fishing year, with at least one strong weather front moving through each month, thus crippling fishing activity. Although the area was not affected by Hurricane Andrew, it did see a barrage of bad storms including a tornado that caused large scale damage to the area. Luckily the fishing industry was not affected. A red tide formed to the south but did not make its way this far north. Fish kills were reported well offshore as a result of the red tide.

## Reef fish:

Reef fish landings of all the major target species were higher than in 1991. Red grouper, gag, and amberjack increased $24 \%, 23 \%$, and $39 \%$, respectively. Deep water groupers(i.e., yellowedge and snowy) increased $38 \%$. Fish trappers in northern counties landed $62 \%$ more sea bass than in 1991. This increase was fueled by an influx of new boats into this fishery from St. Marks.

Grouper landings peaked in February, during the spawning aggregations. Boats reported a short spawning season; most fish were spawned out by mid-March. Longliners averaged $4,225 \mathrm{lbs} / \mathrm{trip}$, bandit boats $1,365 \mathrm{lbs} /$ trip, and deep water longliners 6 thousand $\mathrm{lbs} /$ trip. Production from deep water boats only lasted a few months in the winter. In early May, longliners began picking up large amounts of gag, which signaled their summertime migration into shallow water. This year bandit boats were able to fish within sight of the beaches, in 40-80 fathom depths. Shortly thereafter they moved back to deeper water, as competition from recreational anglers and catches of undersized fish became problems.

Even though Hurricane Andrew missed this fishing area, reef fishing was inconsistent for the latter half of August and all of September. It was not until October that fishing picked up; October turned out to be the busiest month of the year. The hurricane may have caused an unusual northward movement of silk snapper. Typically, the northern range of silk snapper is Naples. After the hurricane, silk snapper were being caught as
far north as Bradenton.
Grouper prices remained high throughout the spring, since production could not meet demand due to weather conditions. Grouper prices crashed to nearly $\$ 0.50 / \mathrm{lb}$ in early June, when most boats in the Gulf unloaded trips, but by July the prices had rebounded and remained stable at $\$ 2.50 / \mathrm{lb}$ (gag) and $\$ 2.00 / \mathrm{lb}$ (red grouper) for the remainder of the year. Amberjack fishing had a good year; boats averaged 1,850 pounds for a two-day trip. Larger amberjack moved offshore in the late summer leaving the "smaller" fish behind. These "small" fish averaged 32-34 inches in length and 15-20 pounds in weight. Boat captains would like to see the size limit lowered. Normally, small amberjack school with the larger individuals and it is not possible to target just large fish. Since most amberjacks swallow the hook, it is felt that survival of released fish is low.

In 1992 the Southern Offshore Fishing Association(SOFA) proposed to allow longliners to fish inshore to 15 fathoms. Some persons in the reef fish industry fear a closure within nine months and a dramatic price drop if approved. Others in the fish industry believe that if fisherman are allowed to fish inshore to 15 fathoms that one year of strong fishing could destroy the recent progress made to restore the red grouper population. If enacted, the bandit boats would like to see the quota split by gear type so they could continue to fish until their quota is filled.

## Shark:

Shark landings increased $41 \%$ in 1992. Eleven new boats entered the shark fishery and the "split" trip became very popular. On split trips boats make one shark set at night and fish grouper during the day. Shark landings started low in 1992 and climbed gradually throughout the summer. As the weather deteriorated, shark landings tapered off. Following heavy shark landings in June, prices dropped from $\$ 0.70 / \mathrm{lb}$ to $\$ 0.45 / \mathrm{lb}$ and remained low throughout the rest of the year.

## Net fishing:

Mullet landings increased $41 \%$ in 1992. Mullet landings began to increase in June and remained high through September. Dealers limited boats to $200 \mathrm{lbs} / \mathrm{day}$, because they could not sell all the mullet that was being landed. A regulation was proposed that would close mullet netting for the last two weeks of each month of the roe season. The regulation was not supported by the mullet industry and did not pass. Mullet fishermen would prefer regulation during the summer peak to allow more mullet to survive until spawning. Pressure to ban mullet netting has increased, as recreational interests continue to push for legislation. Three traditional mullet grounds closed: two due to the presence of seagrass beds and one because nearby residents did not like seeing the net boats on

## "their" water.

Spanish mackerel landings increased $47 \%$ in 1992, The spring mackerel run produced heavy landings in February and March, with landings moderate through April. By midMarch the market was flooded with Spanish mackerel and the price fell from $\$ 0.45$ to $\$ 0.20 / \mathrm{lb}$. The fall run was slow, with October producing good Spanish mackerel landings. Rough weather conditions throughout November limited effort.

Jack crevelle landings increased $28 \%$ from 1991. Landings remained steady from mid summer through early winter.

Tilapia landings increased $13 \%$ in 1992. Many gillnetters turned to cast netting when conditions were too rough on the bay. Catches of mojarra, a bycatch of tilapia fishing, increased 29\% from 1991.

Catches of thread herring by purse seines increased $29 \%$ from 1991.

## Shrimp:

Pink shrimp landings increased $10 \%$, with peaks in the early summer. As always, the shrimp boats left for Texas in late June. Many returned home earlier than usual, since shrimp catches there were poor. They returned to find rock shrimp abundant off Apalachicola. Rock shrimp catch rates remained high through the summer and remained steady through September. The smaller inshore boats enjoyed increased shrimp catches, but many were cited by the Florida Marine Patrol for violation of an average size count law that was enforced this year.

## Crabs:

Landings of blue crabs increased $35 \%$; trap effort increased $44 \%$ over 1991. Blue crab landings peaked in the early summer; prices remained stable throughout the year. Crabbers in the Cedar Key area reported trouble with blacktip sharks, green turtles and loggerhead turtles hitting their traps.

Stone crab production was up $49 \%$ from 1991. Landings of large stone crab claws increased $53 \%$, while mediums increased $44 \%$ from 1991. Large claws comprised the larger portion of the stone crab landings during 1992. Usually the large stone crabs are harvested by inshore crabbers, however; they are becoming more common offshore as well. Offshore stone crab landings increased $3 \%$ from 1991.

## Oysters:

Oyster production in Wakulla County increased $58 \%$ from 1991. This increase was in part due to increased effort by fishermen forced out of other fisheries and by better water conditions. Oyster landings in the Cedar Key area increased $14 \%$ in 1992. This area has switched to oyster farming. There are very few oyster tongers left. The farm raised oysters brought $\$ 2.03 / \mathrm{lb}$ versus those tonged at $\$ 2.31 / \mathrm{lb}$, with both prices being lower than in 1991.

## Sponge:

Sponge landings increased $20 \%$ from 1991. This increase was driven by two factors: better quality sponges and increased effort. Many part-time spongers resumed fishing after a poor 1991 season. The average 1992 price dropped $14 \%$ across all species compared to 1991.

## Recreational fishing:

Grouper fishing was very heavy, but only about one in ten fish caught were of legal size. The king mackerel season came on schedule. The spring mackerel tournament produced many "schoolies" with an average weight near 15 pounds; the fall event produced fewer fish but they were larger (average 27 pounds). Anglers tagged and released 350 fish during the tournament. Seasonal catches offshore included amberjack and cobia. Inshore waters produced steady catches of snook, redfish, and seatrout. Seasonal catches of tarpon and Spanish mackerel were good.

## GULF - ESCAMBIA COUNTIES

## Fish:

Netters had a very productive year. The number of purse seiners increased from 9 to 20 due to some beach seiners switching gear. There was the usual gillnet and some beach seine activity. The fishing year started off very slowly until April, when Spanish mackerel showed up. Although fewer boats fished for Spanish mackerel locally, 1992 landings in the area increased $43 \%$. Cigarfish showed up the last week in April and demand for them was quite strong. Water temperatures were colder in early May, which might explain why ladyfish and blue runners didn't come inshore until late May. Landings of all bait species were strong until late July heat drove the fish offshore. There was some friction during the season between purse and beach seiners, because the purse seiners with their planes out-competed the beach seiners. Fishing improved in

September and October. The fall run of ladyfish was very poor, due in part to bad weather. Overall, preliminary landings data show that catches increased $39 \%$ for cigarfish, $13 \%$ for blue runners and only slightly for ladyfish compared to 1991. Landings were down 35\% for Spanish sardines. The gillnetters had a relatively good year for mullet; landings were $43 \%$ higher than in 1991.

Grouper landings increased $5 \%$ from 1991. The number of bottom longliners increased from 14 in 1991 to 22 in 1992. The longliners targeted yellowedge and red groupers. Since grouper fishing was very slow during the summer, a couple of longliners went after tuna. The grouper handliners complained about the small size and scarcity of gag off this region.

The handline fishery (primarily for vermilion and red snappers) was very strong. There were 148 part and full time boats in the fishery. The red snapper fishery opened January 1 and the market was flooded by the end of the first week. The ex-vessel price dropped from $\$ 2.40$ to $\$ 1.70 / \mathrm{lb}$. The boats had no trouble catching fish. Most of the boats from this area fished off Alabama and Louisiana. There were more 2-4 pound size fish in the catches than had been in many previous years. The large catches ended with a quota closure in February and a subsequent re-opening for one month with a 1000 -pound trip limit. After the final closure of the fishery, most of the handliners went fishing for vermilion snapper and scup. Despite the short season, red snapper landings were $10 \%$ above those of 1991. Vermilion snapper landings were $44 \%$ higher than in 1991 and exvessel prices were higher than ever. Some of the reef fish boats had a difficult time financially after the closure. After Hurricane Andrew in late August, there were more red snapper off this area than there had been in previous years. The charter and sport boats had no trouble getting their red snapper limits during 1992.

Twenty-one surface longliners unloaded tuna and other oceanic species, down from 28 in 1991. Reported landings of yellowfin tuna were considerably higher than in 1991. The data received in 1992 from local tuna buyers who bought across the Gulf (representing 826 trips) showed the average size of yellowfin tuna in 1992 was 66.6 pounds, down from 78.8 pounds in 1991 and the average catch of tuna per trip was 4579 pounds compared to 3658 pounds in 1991. The small tuna that pulled the average size down really showed up in June. The boats didn't target dolphin fish, a bycatch species, as much as they did in 1991 and consequently landings of dolphin were down.

There were only 11 shark boats unloading in this area in 1992, down from 18 in 1991, but state landings increased considerably.

King mackerel landings were up in 1992, as more and more boats switched gears to fish for them during the summer and fall runs.

## Crabs:

It was another poor year for the blue crab fishery. Crab landings decreased for the second straight year. Fishermen complained that the now "plentiful" redfish are eating the crabs.

## Oysters:

Oyster landings were down in 1992 with demand being off due to several deaths and the subsequent health warnings resulting from eating raw oysters which were tainted with infectious bacteria.

## Shrimp:

The biggest shrimp news in 1992 was the enormous increase in rock shrimp landings. Even though prices weren't that high, the quantities landed more than made fishing worth the effort.

## FRANKLIN COUNTY

The weather was near normal in 1992; however, the spring was windy with several storms that dumped large quantities of rain. The summer had average temperatures and more storms that dumped large quantities of rain. The winter was relatively warm and dry, so by year's end, the rainfall was 4 inches below average.

## Crabs:

Preliminary 1992 data indicate the blue hard-shell crab catch remained constant; however, the number of boats exploiting blue crabs is down. Only three soft-shell crab producers were still in business, so soft-shell catch production was lower than in 1991.

## Oysters:

After 1991, the best oyster season since the hurricanes of 1985, there was hope that 1992 oyster season would be as good. However, media attention to a death from a bacterial infection carried by oysters and several rain closures combined to make 1992 a bad year for the oystermen. Harvest was $65 \%$ lower than in 1991. There was just no market for local oyster production.

## Shrimp:

Total shrimp production increased $15 \%$ in 1992 compared to 1991 . Rock shrimp comprised $45 \%$ of the 1992 catch. When rock shrimp was factored out, the rest of the shrimp catch matched 1991 performance. Rock shrimp prices dropped to $\$ 0.45 / \mathrm{lb}$, and every freezer in the county was loaded to the gunnels.

## Fish:

Net fishing continued to be a principal fishery for Franklin County. Roe season mullet landings were so heavy that the fish houses started buying them for bait. Later, dealers stopped buying them altogether and prices dropped to as low as $\$ 0.15 / \mathrm{lb}$. Spanish mackerel and spotted seatrout landings were double the 1991 landings; king mackerel landings were down by the same margin. Bait fish landings remained constant.

Longline landings have increased, but the fish are trucked in from as far west as Louisiana and as far south as Tarpon Springs, Florida. Combined grouper landings increased $16 \%$ from 1991 and combined snapper landings increased $36 \%$, with most of the snapper increase being from several huge loads of red snapper that tripled the 1991 landings. Vermilion snapper landings increased $45 \%$ and the price increased from $\$ 1.25 / \mathrm{lb}$ to $\$ 1.85 / \mathrm{lb}$, due in part to the red snapper season closing in February. Amberjack landings were down $35 \%$ and the fish were small. Shark and shark fin landings both increased, $40 \%$ and $87 \%$, respectively from 1991.

## ALABAMA

## Summary:

Total landings increased $8 \%$ to 23.7 million pounds, while total value decreased $3 \%$ to $\$ 35.6$ million in 1992. In 1992 shrimp were down $10 \%$; oysters landings tripled.

## Shrimp:

Shrimp landings in 1992, down $10 \%$ from the 1991, were also down $10 \%$ from the 5 year average. In the first six months, Alabama shrimp vessels ranged from the northern Gulf to the Florida's West Coast for brown and pink shrimp and reported a $25 \%$ reduction in catches. When the 1992 Alabama brown shrimp season opened inshore, landings were fair but the shrimp were below normal size for the second consecutive year. White shrimp landings from Mobile Bay in October were noticeably improved; boats caught about two boxes of large shrimp tails per day, while boats working in

Mississippi Sound caught less than two boxes of shrimp per day of mixed sizes.
Shrimp tail prices started the year about $\$ 1 / \mathrm{lb}$ less compared to the same period last year and stayed that way until June, but finished the year $\$ 0.40$ higher $/ \mathrm{lb}$. Heads-on prices increased during the year before leveling off in August and declined by as much as $\$ 0.30 / \mathrm{lb}$ for large and medium count shrimp in October.

## Oysters:

Alabama produced 1.2 million pounds of oyster meats in 1992, triple the production in 1991. Public reefs accounted for $98 \%$ of the landings, with most of the oysters coming from waters west of the Dauphin Island Bridge. Private beds accounted for only $2 \%$ of the oyster landings in 1992. Except for a brief period in March when waters were closed, oyster landings were steady for the first eight months with a limit of eight sacks per day per boat. Oyster landings further increased in September through December when twelve sacks per catcher were allowed, usually taken in less than a day. Price per sack pound stayed steady at $\$ 0.11 / \mathrm{lb}$ except for a brief period in September. Shucked oysters brought the fishermen $\$ 17 / \mathrm{gal}$. Overall, oyster prices to the boats declined $20 \%$ in 1992. Local oyster production showed a significant increase, but shucking plants/processors remained heavily dependent on out of state oyster stock to keep plant production at a high level.

## Crabs:

Blue crab production in 1992 was 3.5 million pounds, up $29 \%$ for the year and equal to the last five years' average. Blue crab catches were off $50 \%$ for the first four months, during which time a number of crabbers temporarily switched to the more productive oyster fishery. Catches increased in May and did well for the rest of 1992. Blue crab prices to the boats varied widely, ranging from $\$ 0.70 / \mathrm{lb}$ in February to $\$ 0.25 / \mathrm{lb}$ from June to August. For 1992, prices increased an average of $\$ 0.06 / \mathrm{lb}$. Local crab processing plants remained dependent on out of state suppliers, primarily Louisiana, for most of their production.

## Finfish:

Finfish landings were 5.45 million pounds, up $37 \%$ for 1992 . Mullet increased $6 \%$, but menhaden (bait) still exceeded it as the volume leader, while shark slipped to third in rank after a $50 \%$ reduction in landings during 1992. Although mullet landings increased, valuable roe mullet taken in the fall declined $20 \%$. Red snapper landings increased $20 \%$ in the abbreviated season, but increased effort saturated the market, with prices dropping as low as $\$ 2 / \mathrm{l}$.

Fuel:
Diesel fuel prices stayed steady at $\$ 0.62$ to $\$ 0.68 /$ gal during 1992.

## Miscellaneous:

The Bayou La Batre fishing boat construction industry was steady for 1992 and at the same level in 1991, with the majority of the boats being exported to foreign countries. Several new shrimp vessels joined the fleet, but the overall number of shrimp craft declined as more were sold or left the area.

## MISSISSIPPI

## Summary:

Landings of all species excluding menhaden were down $8 \%$ (1:2 million pounds) from the 14.3 million pounds in 1991. Value for all species including menhaden was down $9 \%$ ( $\$ 2.9$ million) from 1991.

## Shrimp:

Shrimp landings were 10.2 million pounds, down $14 \%$, with a value of $\$ 19.8$ million, down $3 \%$ from 1991. Average price per pound was up $\$ 0.21$ to $\$ 1.95 / \mathrm{lb}$. Brown shrimp comprised $73 \%$ of the landings caught during the summer season. White shrimp were $24 \%$, with pink shrimp, rock shrimp and sea bobs compromising the remaining $3 \%$.

## Oysters:

Landings of oysters in 1992 increased dramatically with 708 thousand pounds of oyster meats reported, valued at $\$ 808$ thousand. The Mississippi Bureau of Marine Resources opened the oyster tonging reefs in early fall for oystermen before winter rains could cause pollution resulting from raimfall runoff. Processors more than met the market demand for oysters. The amounts of oysters trucked in from other states were lower as a result of increased state landings.

## Crabs:

Hard blue crab landings declined $2 \%$ to 443 thousand pounds, but increased $29 \%$ in value to $\$ 207$ thousand in 1992.

## Finfish:

1992 landings were down $7 \%$, due to a decline in landings of industrial fish and menhaden. Demand for pet food fish remained steady. Foodfish landings were down $16 \%$; landings of red and black drum, and vermilion snappers increased, but landings of eleven other major species decreased.

Demand for roe mullet was high; landings increased 8\% to 473 thousand pounds in 1992. The value of roe mullet increased to $\$ 379$ thousand, double that of 1991. Red snapper landings were down $3 \%$, but up $6 \%$ in value, since landings were limited by the quota. Vermilion snapper landings increased $41 \%$ in 1992 and value increased $37 \%$. Sheepshead landings were down $40 \%$ and flounder landings were down $52 \%$ from 1991.

## LOUISIANA

## SUMMARY:

Total 1992 Louisiana fish and shellfish landings decreased $18 \%$ to 978.5 million pounds, but increased $13 \%$ in value to $\$ 276.4$ million compared to 1991 . A $22 \%$ decrease in poundage of the high-volume/low-value menhaden fishery was offset by increases in lesser-volume/high value species such as king mackerel, mullet, drum, shark, yellowfin tuna, red snapper, other snappers, and shrimp.

Hurricane Andrew struck the Louisiana coast on August 25-26, 1992 and wreaked havoc across the state. According to the Louisiana Department of Wildlife and Fisheries (LDWF), the total monetary damage to natural resources in the state was $\$ 266$ million and the hurricane had negative impacts on the fishing industry. Over $\$ 10$ million in damages to product, seafood plants, and vessels was incurred. One fishing vessel, the Lucky Le, sank as a result of Hurricane Andrew with all six Vietnamese crewmen presumed drowned.

At the request of the Gulf and South Atlantic Fishery Management Councils, commercial regulations in state waters for federally managed species were changed for red snapper, king mackerel, Spanish mackerel and cobia. Regulations for these species are now consistent in both state and federal waters.

The offshore Artificial Fishing Reefs Program in the Gulf of Mexico, first begun in 1986, was expanded by the LDWF. Oil companies donated oil and gas platforms, which were toppled in place or towed to desired locations and submerged. The companies were able to save a substantial amount of money over the otherwise expensive requirement (by
law) to tow defunct platforms to shore. A portion of the savings were donated to the state's program by the oil companies. There are some 40 thousand oil and gas platforms in use by oil companies in the Gulf of Mexico, $90 \%$ of which are located off the Louisiana coast. Nine sites and 24 structures are enrolled in the artificial reef program, with more planned for 1993.

## Shrimp:

Shrimp landings increased $2 \%$ in poundage and $2 \%$ in value from 1991, with most of the increase in the small, low-valued winter sea bob. Brown shrimp landings were down slightly while white shrimp remained constant.

Because of the debris left by Hurricane Andrew, NMFS suspended the TED law from September to October 4, 1992 from the Mississippi River to the western border of the Atchafalaya Bay area, from shore to 15 nautical miles offshore.

The more stringent TED regulations promulgated in December 1992 brought little reaction from the shrimp industry since, it was during the slow shrimping time of the year. The requirement to use TEDs in both inshore and offshore waters will surely impact fishermen much more in mid-1993 when shrimping begins in earnest.

## Menhaden:

This menhaden industry suffered a $22 \%$ decline in landings in Louisiana during 1992, with landings the lowest since 1977. Although Hurricane Andrew played a part, menhaden plants have merged and one plant, which has been experimenting with new methods, suffered a temporary decline in menhaden production. In the entire state, there are now only five menhaden reduction plants and one bait plant operating. The menhaden industry is unique with all expenses and burden on the plant. Due to the low value of menhaden, vessels in other fisheries do not "free lance" to fish and sell menhaden to these plants. In addition to processing, plants must purchase their own (very expensive) vessels and gear, and hire crews to fish specifically for menhaden.

## Oysters:

Oyster landings increased $26 \%$ from 1991, the first increase since oyster landings in Louisiana began a steady decline in 1989. The increase would probably have been much greater had those areas in the path of Hurricane Andrew not been severely damaged.

## Finfish:

Offshore, increases were experienced in many fisheries. King mackerel landings increased $87 \%$ ( +508 thousand lbs ), due mainly to "state waters" landings after the federal zone closure. The state now has mackerel seasons that coincide with those in federal waters. Sharks landings increased $53 \%(+1,319$ thousand lbs$)$. Yellowfin tuna landings increased $31 \%(+1,595$ thousand lbs). Grouper landings increased $26 \%(+101$ thousand lbs), probably due to the red snapper closure which caused fishermen to target grouper. Red snapper fishery landings increased $18 \%(+213$ thousand lbs). The red snapper quotas were reached very quickly in 1992, after which changes were made for next year's red snapper regulations and quotas. Landings of other snappers increased $24 \%$ ( +160 thousand lbs ), and swordfish were down $3 \%$ ( -25 thousand lbs ).

Inshore, roe mullet landings increased $69 \%(+2,462$ thousand lbs) in 1992. Black drum landings increased $34 \%$ ( $+1,064$ thousand lbs), and sheepshead up $25 \%$ ( +603 thousand lbs ). Spotted seatrout landings were down $22 \%$ ( -269 thousand lbs). Red drum was declared a game fish again this year by the LDWF.

## Crabs:

Blue crab landings decreased $2 \%$ ( $-1,233$ thousand lbs ), with prices fluctuating, going up when supply was scarce and down when it was ample.

The Louisiana Crab Task Force got LDWF's approval for a stainless steel tag to be used on crab traps for both commercial and recreational fishermen. The requirement went into effect July 1, 1992.

## Miscellaneous:

The LDWF and the U.S. Department of Interior's Minerals Management Service (MMS) are producing a series of six large ( $25^{\prime \prime} \times 35^{\prime \prime}$ ) full color saltwater fishing area maps (from inshore to 30 miles offshore) available at a nominal cost. Together, the six maps will span the entire Louisiana coast. Each map shows locations of oil and gas production platforms, artificial reefs, wrecks, angling tips and species identification.

## St. Mary Iberia \& Vermilion Parishes:

## Summary:

This was the area Hurricane Andrew came through on August 25-26, 1992. All fisheries
were affected. Offshore, a line of dead fish 5 to 10 feet wide and 20 miles long washed ashore on Point Aux Fer Island south of Morgan City, the area where the eye of the hurricane came ashore.

In the freshwater/basin area, over $70 \%$ of the area's fish population was destroyed, all but eliminating the 1992 freshwater finfish industry. Restoration of the basin's resources began immediately. The Corps of Engineers opened flood gates to flush out rotting water and debris. Restocking with fingerlings was begun by donations from conservation and sports fishing groups and private businesses.

## Shrimp:

Production rose $33 \%$ in Iberia Parish and $7 \%$ in Vermilion Parish, while that in St. Mary's Parish declined 5\%. Prices in 1992 were stable. Processed peeled shrimp production rose $31 \%$, due somewhat to offshore waters remaining open during the late winter and spring.

## Finfish:

Decreased landings quotas in the spotted seatrout and red snapper fisheries, and restricted seasons for both, contributed to the saltwater finfish production decline in 1992.

Gillnetters received additional regulation with mesh sizes and a new time schedule for setting nets.

## Crabs:

Live hard blue crab production was up in 1992, prices averaged $\$ 0.42 / \mathrm{lb}$. Processed hard crabs yielded between 6 to $13 \%$ meats, while retail prices ranged from $\$ 7$ to $\$ 10 / \mathrm{lb}$ of picked crab meat.

Soft crab production was low during 1992; ex-vessel prices averaged $\$ 2.29 / \mathrm{lb}$. Retail prices ranged from $\$ 15$ to $\$ 21$ per dozen.

Several violent incidents involving crabbers and shrimpers occurred in Vermilion Bay during 1992. A joint meeting of the two groups in December settled their conflict and resulted in a cooperative agreement.

## Oysters:

Hurricane Andrew nearly destroyed the local oyster beds. The only production of any
significance occurred in the Marsh Island area. Recovery of these oyster beds is expected to take at least 18 months. Oysters yielded $3.5 \%$ to $7 \%$ meats and prices averaged $\$ 2.53 / \mathrm{lb}$.

## Crawfish:

Although the hurricane caused extensive damage to the fishing grounds and many of the plants received serious damage, crawfish production was up and prices averaged $\$ 0.54 / \mathrm{lb}$ during 1992. The average yield was $15 \%$ of picked crawfish meat. Sales of fresh live crawfish were down, with most going to raw peeling processors. The U. S. Justice Department is investigating alleged crawfish price fixing.

## Menhaden:

Menhaden production decreased significantly immediately following Hurricane Andrew. Fish oil production in 1992 was down $16-35 \%$, meal production was up $9-15 \%$, solubles increased $18 \%$ and bait production increased $29 \%$.

## Plaquemines Parish:

## Shrimp:

Landings for 1992 exceeded 15 million pounds and were about equal to 1991. Landings of white and brown shrimp and of sea bobs were about equal to those of 1991. Without the impact of the hurricane, shrimp landings probably would have shown an increase in 1992. The overall value of shrimp landings fell $\$ 1.5$ million compared to 1991.

Crabs:
Production of blue crabs remained fairly constant, but prices were down $39 \%$ for 1991 , causing a lower value of nearly $\$ 0.5$ million.

## Oysters:

1992 oyster production was about the same as in 1991. Again, without Hurricane Andrew, production would certainly have been higher. Ex-vessel sack prices were down $\$ 1 /$ sack at the end of 1992 , selling for $\$ 12 /$ sack, although prices ranged from $\$ 11.50$ to, briefly, $\$ 16 /$ sack. For 1992, the value of oyster production was down $16 \%$ ( $-\$ 1.5$ million).

## Finfish:

1992 finfish landings were down $20 \%$ ( -60 million pounds). However, substantial exvessel price increases resulted in a $\$ 2$ million increase in value (up $8 \%$ ) for 1992. Specifically, menhaden landings were down $15 \%$, gulf kingfish down $73 \%$, and black drum up a dramatic $163 \%$ in 1992.

## Fuel:

The price of diesel fuel dropped sharply but increased to $\$ 0.68 / \mathrm{gal}$ and was on an upswing as 1992 closed.

## Miscellaneous:

Debris left in the water from Hurricane Andrew caused TEDs to be even more unpopular during the latter half of 1992. Shrimp effort interviews remained almost impossible to get, since Vietnamese made up about $80 \%$ of the fishermen in this area and were unwilling or unable to talk with NMFS port agents. Dock owners grudgingly cooperated but would not conduct or translate interviews.

## Orleans, St. Tammany and St. Bernard Parishes:

## Shrimp:

Total shrimp effort was down almost $10 \%$ but total landings increased during 1992, with brown shrimp accounting for $73 \%$ of the total. Brown and white shrimp were mostly mid-size throughout the season. Ex-vessel shrimp prices started and remained high throughout the season. Docks charged between $\$ 0.05$ and $\$ 0.10 / \mathrm{lb}$ commission most of the year.

Shrimp effort stopped very early in the fall of 1992 and most docks were closed by midNovember, with all closed by December. Two shrimp dealers went out of business this year, and two dealers stopped buying from commercial fishermen. Three new shrimp docks opened, but only one stayed open for the spring brown shrimp season.

## Crabs:

Landings of hard blue crabs were down $8 \%$ ( $-800,000 \mathrm{lbs}$ ), but the value was up for 1992. Soft crab production, however, was 60 thousand pounds higher, but the total value was considerably less than in 1991.

## Oysters:

Oyster production was significantly higher in 1992, but prices were slightly lower in 1991.

## Finfish:

Landings of 3,250 thousand pounds were reported, with a value of $\$ 1,355$ thousand for 1992. $62 \%$ of the catch was black drum and sheepshead.

## Fuel:

The price of diesel fuel was $\$ 0.75$ to $\$ 0.78 / \mathrm{gal}$ in 1992 , up slightly from the 1991 average price of $\$ 0.72 / \mathrm{gal}$.

## Terrebonne Parish:

## Shrimp:

Shrimp landings decreased 188 thousand pounds, and total trips (effort) were down 1,447 during 1992. Sea bob landings increased over a million pounds.

Shrimp landings were poor for the first half of the year. In the last half of the year, shrimp sizes were small overall, but the waiving of the 100 count law helped the total landings increase. Most of the small shrimp and sea bobs were peeled or dried by the area's processing plants. Prices varied most of the year due to competition. No shrimp dealers closed during 1992.

The TED controversy was quiet during 1992, with the red snapper bycatch controversy taking its place.

## Crabs:

Landings were good to fair during all of 1992. Ex-vessel prices ranged from $\$ 0.30$ to $\$ 0.65 / \mathrm{lb}$. More traps per fisherman were in use.

## Oysters:

Oyster landings were lower in 1992. Prices were between $\$ 10$ to $\$ 14 /$ sack. Adverse
publicity and concerns about pollution from the hurricane really hurt the oyster industry. In addition, hurricane damage to homes kept most fishermen home, so local dealers resorted to shucking oysters trucked in from out-of-state.

## Miscellaneous:

Terrebonne Parish is just east of where the eye of the Hurricane Andrew came ashore in late August 1992. Flood damage to homes was extensive. Relief effort came to the area in the forms of money, food, lumber and labor for housing. Federal Emergency Management Agency (FEMA) made many grants and loans in the area. At the end of the year some families had not yet returned home, but were living with family members, friends or in free housing. Hurricane repairs were still going on in all areas, with the recovery period being long and expensive.

## Upper Jefferson Parish:

## Shrimp:

Shrimp landings in the first half of 1992 increased $8 \%$, but decreased in the last half about $10 \%$. Overall, landings were down $2 \%$ from 1991 and down $13 \%$ over a 5 -year period.

## Crabs:

Production of hard blue crabs increased slightly in 1992, although the 5-year average was down 30 to $35 \%$. Dealers bought mostly culled crabs, with ex-vessel price increases of about $\$ 0.30 / \mathrm{lb}$. Very little crabbing occurred between May and November, but, after the shrimp season, a few fishermen went back to crabbing.

## Oysters:

The number of sacks of oysters landed during 1992 declined, but oyster meat yield production increased $5 \%$. Prices were $15 \%$ to $20 \%$ lower than in 1991.

## Finfish:

Gulf vessels trawled for "bull drum," Gulf kingfish (king whiting), flounder, and sheepshead, which yielded fair to moderate catches, while inshore gillnetters landed mostly spotted seatrout. Inshore trotliners caught mostly freshwater catfish and gars.

## Fuel:

The price of gasoline ranged from $\$ 1.12$ to $\$ 1.27 / \mathrm{gal}$, down about $\$ 0.03$ on the high end from 1991. The price of diesel fuel ranged from $\$ 0.62$ to $\$ 0.78 / \mathrm{gal}$, down about $\$ 0.03 / \mathrm{gal}$.

Ice:
The price of ice was from $\$ 0.25$ to $\$ 0.50$ lower for a 300 -pound block, compared to last year's average of $\$ 6.50 /$ block.

## Miscellaneous:

Heavy rainfall well above the annual average, Hurricane Andrew's disruption of the fall shrimp season, continuation of non-tariffed fishery imports, state/federal fishery quotas, and more stringent TED regulations all had adverse impacts on the fisheries. With only one shrimp canning plant left in the New Orleans area, shrimp dealers trucked excess shrimp to Mississippi and Alabama plants.

## Lafourche Parish \& Grand Isle Area:

Shrimp:
Shrimp landings in 1992 were down $14 \%$ in Lafourche Parish and $19 \%$ in Grand Isle Parish. The shrimp season started very slowly, with very small brown shrimp, and did not improve significantly. However, the scarcity of shrimp caused prices to rise, with three price increases in one day, and prices remained high for the rest of 1992. After Hurricane Andrew, offshore landings improved greatly and larger vessels had good shrimping trips all the way into 1993.

## Crabs:

Crab landings were virtually unchanged from 1991, except for a slowdown toward the end of 1992. Prices were about the same as in 1991.

## Oysters:

Many oyster beds were slightly buried under mud as a result of Hurricane Andrew. toward the end of 1992 oyster landings rebounded enough to make the overall average price lower than in 1991.

## Finfish:

The red snapper season, which had been closed since August 1991, started with a bang in 1993, with much effort and heavy landings ( 10 to 15 thousand lbs for a two-day trip) driving prices down quickly from $\$ 3$ to $\$ 1.50 / \mathrm{lb}$. Red snapper landings continued heavy and, before the end of February, the season was closed. However, after protest from the fishermen, the red snapper season was reopened for a month in late spring.

Mackerel landings were good right from the opening season on July 1. As with snappers, king mackerel prices dropped from $\$ 0.80-1.20 / \mathrm{lb}$ to a low of $\$ 0.50-\$ 0.70 / \mathrm{lb}$. Later, the prices rebounded to near the opening day prices of 1992.

Inshore, the spotted seatrout season opened September 1, 1992 with landings starting and remaining low. There were good landings of sheepshead and drum, especially off the beach in Grand Isle.

## Fuel:

Fuel prices stayed very steady throughout 1992 , with gasoline between $\$ 1$ and $\$ 1.25 / \mathrm{gal}$, and diesel fuel between $\$ 0.55$ and $\$ 0.65 / \mathrm{gal}$.

## Miscellaneous:

Weather played a significant role during 1992. The beginning of 1992 were unusually warm, spring rains were heavy, and summer weather was tropical. When Hurricane Andrew came through in late August 1992, nearly every fish facility suffered some damage.

## Cameron Parish:

## Shrimp:

The 1992 shrimp production increased $33 \%$ ( +3 million pounds).

## Crabs:

Hard blue crabs landings in 1992 increased $19 \%$ from 1991 levels.

## Oysters:

Production of oysters during 1992 was $20 \%$ higher than in 1991. The oyster season was reopened and extended after an outcry from oystermen. Oyster prices ranged from $\$ 12$ to $\$ 15 /$ sack. A shortage of oyster buyers during 1992 drove the price down, even though production was higher and the quality of oysters was better.

## Finfish:

Red snapper landings during 1992 increased $54 \%$, flounder $33 \%$, sheepshead $21 \%$, and spotted sea trout $29 \%$.

## Menhaden:

Landings of menhaden during 1992 were $17 \%$ lower than in 1991.

## TEXAS

Preliminary data suggest that Texas landings in 1992 were over 96 million pounds, a $11 \%$ decrease from 1991, and the value was about $\$ 181$ million, a $15 \%$ decrease from 1991.

Fish:
Fish landings increased to 4.9 million pounds in 1992. Swordfish landings were 191 thousand pounds (a $6 \%$ increase) with a value of $\$ 547$ thousand (a $22 \%$ increase).

Yellowfin tuna landings increased $18 \%$ to 1.3 million pounds; ex-vessel value was a $\$ 2.4$ million. Bluefin tuna landings totaled 76 thousand pounds, more than triple the 1991 landings; value was $\$ 590$ thousand. Bluefin tuna prices were as high as $\$ 17 / \mathrm{lb}$, depending on the quality of the fish.

Reef fish landings increased in 1992. Even though the season only lasted 53 days before the quota was met, red snapper landings ( 902 thousand pounds) were triple those of 1991. Grouper landings, ( 124 thousand pounds) increased $25 \%$, but tilefish (only 5 thousand pounds landed) declined about $83 \%$ from 1991. Average prices declined $\$ 0.22 / \mathrm{lb}$ for red snapper (total value $\$ 1.5$ million), increased $\$ 0.26 / \mathrm{lb}$ for grouper (total value $\$ 198$ thousand) and remained stable for tilefish (total value $\$ 6$ thousand).

## Shrimp:

Total shrimp landings were 85.1 million pounds (heads-on), a $11 \%$ decrease from 1991. Total shrimp value decreased $16 \%$ to $\$ 167.2$ million. Total shrimp landings in the bays were about 21 million pounds, a $4 \%$ decrease from 1991.

Texas shrimp landings from Gulf waters decreased $18 \%$ to 61.2 million pounds; most of the catches occurred off the southern Texas coast.

The Gulf shrimp closure off Texas in May, June and July 1992 extended from the beach to 200 miles. This prohibited all shrimping outside the bays during the closure. The Texas brown shrimp season got off to a slow start with catches in July and August being much lower than normal, but catches remained steady during the winter months.

Once again some pond-raised "exotic" shrimp (Penaeus vannamei) accidentally escaped into the Arroyo Colorado waters. In February some "exotic" shrimp, presumably last year's escapees, were caught offshore of Port Mansfield. Shrimpers are still concerned about the possible consequences of the accidental introduction of potentially harmful foreign shrimp species into local waters.

## Fuel:

Diesel fuel prices remained fairly stable during 1992 and ranged from $\$ 0.60$ to $\$ 0.75 / \mathrm{gal}$.

## Oysters:

Preliminary 1992 oyster landings totaled 2.7 million pounds of meats, a $7 \%$ decrease from 1991. Oyster beds were closed periodically throughout the 1992 season due to heavy spring flooding. This resulted in lower than average oyster yields for the fourth year in a row. Increased health concerns also hampered the sale of oysters.

## Crabs:

Preliminary blue crab landings for 1992 were of 6.1 million pounds, about the same as in 1991. Stone crab landings decreased to 86 thousand pounds, a $75 \%$ decline from 1991.

## Regulations:

Despite continued protests by the shrimp industry, regulations mandating year-round use of TEDs were implemented starting December 1, 1992. Shrimpers were upset at the
time of notification, since most of them had already removed their TEDs for the threemonth exemption period.

Coast Guard personnel routinely boarded vessels engaged in shrimp fishing during 1992 to enforce the TED regulations. Although TED compliance was better, many vessels were cited for violations. A few vessels were caught fishing during the closure, including one Mexican vessel. Some vessels were cited for Lacey Act violations.

NMFS port agents continued to encounter hostility on the docks, probably due to the TED regulations. This made it almost impossible to obtain shrimp interviews in some areas.

Snapper fishermen were upset at the "free-for-all" red snapper fishing that occurred due to the one-month suspension of permit requirements when the red snapper season opened in January. This concentrated effort resulted in the red snapper quota being filled in 53 days.

The reopening of the red snapper fishery April 3-May 14 permitted boats to fish under a 1,000 pound trip limit. This calmed a lot of tempers and allowed snapper fishermen, especially on smaller vessels, to make an additional profit. At the same time fishermen could qualify for the endorsements that will go into effect in 1993.

## Financial:

1992 was marked by a continuing trend of repossessions of vessels by lending institutions and a growing reluctance by them to loan money for financing fishing vessels and seafood businesses. The shrimp fleet is in poor condition partly due to the generally depressed economy. As a consequence, many craft have left the shrimp fishing industry or were put up for sale. A number of shrimp vessels have been sold and moved to Central American countries. Numerous shrimp dealers sold their businesses, closed their doors, or went bankrupt, and others are just barely making a living.
Weather:
All along the Texas coast annual rainfall in 1992 exceeded the historical average during 1992. Heavy flooding occurred in many areas, mainly along the central and northern Texas coastlines. Although Hurricane Andrew was no threat to this area, many vessels returned to Texas ports for safety. Most hoped for an increase in production as a result of the storm; however, there was only a small increase which lasted for only a few days.

## PORT ARTHUR:

## Shrimp:

Shrimp production for the area was 9.1 million pounds (heads-on weight), about the same as 1991.

## Fish:

Fish landings doubled to 279 thousand pounds in 1992. Red snapper landings quadrupled to 42 thousand pounds and yellowfin tuna landings doubled to 160 thousand pounds. Bluefin tuna landings totalled 32 thousand pounds, which was more than $40 \%$ of the total bluefin tuna landed in the state.

## Crabs:

Blue crab landings declined $47 \%$ to 323 thousand pounds in 1992.

## GALVESTON AREA

## Shrimp:

Total shrimp production for the Galveston area was 13.4 million pounds (heads-on weight); a $30 \%$ increase from 1991. Gulf vessels landed about the same amount of shrimp as in 1991 ( 7.2 million pounds), but bay shrimp boats doubled their landings ( 6.2 million pounds).

Galveston Bay experienced a heavy influx of freshwater during the spring of 1992. Initial catches of brown shrimp were small, but brown shrimp continued to be caught at a steady rate until September. A mild winter may have contributed to increased white shrimp catches in the bay.

## Fish:

Total fish production for Galveston increased to 2.0 million pounds, a $67 \%$ increase from 1991. Galveston remains a major longline landing port; over 805 thousand pounds of yellowfin tuna, 66 thousand pounds of swordfish, 36 thousand pounds of bluefin tuna, and about 472 thousand pounds of red snapper were landed during 1992.

## Oysters:

Total oyster production in Galveston Bay was 2.5 million pounds, a $14 \%$ increase from 1991. Heavy winter and spring flooding caused a large part of the bay reefs to be closed to oystering for most of the season.

## Crabs:

Blue crab landings declined $14 \%$ to 2.5 million pounds. Stone crab landings rose to about 20 thousand pounds in 1992.

## FREEPORT-PALACIOS-MATAGORDA

## Shrimp:

Total shrimp production for this area was 17.2 million pounds (heads-on weight), a $3 \%$ increase from 1991.

## Fish:

Fish landings increased $19 \%$ to 197 thousand pounds in 1992 and included a catch of 75 thousand pounds of red snapper. Flounder, Gulf kingfish (king whiting), and vermilion snapper were the other major species landed:

## Crabs:

Blue crab landings continued to be extremely low (about 6 thousand pounds for 1992).

## ROCKPORT-ARANSAS PASS-PORT LAVACA

## Shrimp:

Total shrimp landings for the area were approximately 23.1 million pounds (heads-on weight), a $28 \%$ decrease from 1991. Offshore catches fell $34 \%$ to 10.9 million pounds and Bay catches decreased $19 \%$ to 12.2 million pounds heads-on weight.

Prolonged heavy spring flooding had an adverse affect on the shrimp fishery in this area. When the bay brown shrimp season opened May 15th, San Antonio Bay waters were almost completely fresh and remained so until early July. The other bay systems had very low salinity readings during the same time. Shrimp catches were extremely poor
during this time.

## Fish:

Fish landings increased $16 \%$ to 989 thousand pounds in 1992. This included more than 133 thousand pounds of red snapper, and 14 thousand pounds of swordfish.

## Oysters:

Due to heavy flooding and frequent reef closures in the bays, oyster production dropped to $\mathbf{1 1 0}$ thousand pounds in 1992.

## Crabs:

Blue crab production increased $23 \%$ to 3.2 million pounds in 1992.

## BROWNSVILLE-PORT ISABEL

## Shrimp:

Shrimp landings totaled 19.2 million pounds (heads-on weight), a $33 \%$ decrease from 1991. The size of the shrimp fleet decreased slightly, since some vessels sank or were sold.

Fish:
Total finfish landings for the area increased to 1.4 million pounds in 1992. Longline activity continued, mainly for swordfish (108 thousand pounds), red snapper (178 thousand pounds) and yellowfin tuna ( 373 thousand pounds).

## PUERTO RICO

The fisheries of Puerto Rico are predominantly artisanal, multigear and multispecies. Most fishermen concentrate their efforts on shallow water reef fish and on a variety of shellfish, mainly spiny lobster and queen conch.

Landings of fish and shellfish were reported by fishermen, fish buyers, and fishing associations around the 42 coastal municipalities and 92 fishing centers (landing areas).

In 1992, total reported landings of fish and shellfish was 2,044 thousand pounds. This
was 419 thousand pounds less than 1991. Some species showed dramatic decreases from 1991 to 1992. Spiny lobster (Panulirus argus), 51 thousand pounds; lane snapper (Lutianus synagris), 48 thousand pounds; various species of tuna, 43 thousand pounds; mackerels, 36 thousand pounds; grunts, 23 thousand pounds; and conch, 17 thousand pounds. On the other hand, some species, showed increases: silk snapper (Lutjanus vivanus), 41 thousand pounds; various species of parrotfish, 24 thousand pounds; and dolphinfish (Coryphaena hippurus), 16 thousand pounds.

## Fish:

The most important fish in terms of percentage of total pounds landed in 1992 was silk snapper, $10.2 \%$; yellowtail snapper (Ocyurus chrysurus), $7.3 \%$; various species of groupers, mainly red hind (Epinephelus guttatus), $6.1 \%$; various species of grunt, mainly white grunt (Haemulon plumieri), $5.7 \%$; various species of parrotfish, $4.5 \%$; lane snapper, $4.5 \%$; dolphinfish, $4.2 \%$; various species of tuna, $3.4 \%$; and mackerels and wahoo (Scomberomorus cavalla and Acanthocybium solanderi), $3.4 \%$.

## Shellfish:

The most important shellfish in terms of percentage of total landed reported pounds for 1992 were spiny lobster, $7.9 \%$, and queen conch (Strombus gigas), $4.4 \%$.

## Virgin Islands

Commercial fisheries in the U. S. Virgin Islands are best described as multi-species, multi-method fisheries. Typical of this description is the shallow water reef fish complex fishery, involving as many as 180 species and many harvesting methods which include traps, hook and line, nets, and spear fishing. Commercial fishermen introduced scuba gear in the 1970s and monofilament gill nets in the 1980s which has had a tremendous impact on the inshore stocks of reef fish, conch and spiny lobster. Inshore resources have been further limited by water quality, environmental health, and availability of suitable habitat on the relatively narrow insular shelf platforms. Inshore fishermen may also harvest pelagic resources from the same vessel as a result of the close proximity of deep water close to shore.

Fish:
Fish traps (pots) remain the most prominent method for harvesting reef fish in the U.S. Virgin Islands and account for $63 \%$ of the total catch. In 1992, approximately 9,000 fish pots were used in the fishery. Census landings information from 1917 indicates that
there were 356 fish pots in the St. Thomas-St. John fishery which caught $350,482 \mathrm{lbs}$ of fish or $9,845 \mathrm{lbs} / \mathrm{pot}$. Fish traps during 1992 from the same fishery ( 6,000 pots) caught $455,852 \mathrm{lbs}$ of reef fish or $76 \mathrm{lbs} /$ pot.

Linefishing is the second most important commercial harvesting technique in St. Thomas, St.John, and St. Croix, accounting for $16 \%$ of the total catch. Significant amounts of offshore pelagics enter into this category; however, inshore versus offshore harvest is not differentiated on the present catch form. Reported landings of finfish for St. Thomas-St. John were $646,553 \mathrm{lbs}$ and $469,729 \mathrm{lbs}$ for St. Croix.

Data from St. Croix indicated that $78 \%$ of the landings were reef fish species. Port agents indicate that there is an increasing use of monofilament nets (gill and trammel nets) used in combination with scuba diving to harvest reef fishes on St. Croix. Target fishes include several species of Scaridae, Acanthuridae and Pomadasyidae. Inshore snappers and groupers comprise less than $5 \%$ of the catch by fish pot. Landings data show a significant effort for pelagic species, such as tuna, dolphin, and wahoo.

## Conch and Whelk:

Minimal amounts of whelk were reported harvested from both island groups. No conch were reported harvested from the St . Thomas-St. John area. This reflects a conch harvest closure in effect for these waters. A total of $24,720 \mathrm{lbs}$ of conch were reported on catch records for St. Croix; however, landings surveys alone show $10,741 \mathrm{lbs}$ harvested. It is believed that the actual commercial landings of conch are more than double that reported on catch forms.

## Lobster:

Landings of spiny lobster for St. Thomas and St. John were $81,536 \mathrm{lbs}$. Landings of spiny lobster for St. Croix were $32,928 \mathrm{lbs}$.

1992 REPORTED LANDINGS

FISHERIE STATISTICS DIVISION
page 1
1992 LANDINGS FOR THE STATE OF NORTH CARDLINA
IN THE SOUTH ATLANTIC REGION


1992 LaNDINGS for the state of north carolina IN the south atlantic region


[^0]in the south atlantic region.


## 1992 LANDINGS FOR THE STATE OF SOUTH CAROLINA <br> IN THE SOUTH ATLANTIC REGION


(1) value less than $\$ 500$ (2) pounds less than 500
fisherie statistics division
PAGE 1

1992 LANDINGS FOR THE STATE OF GEORGIA
IN THE SOUTH ATLANTIC REGION


1992 LANDINGS FOR THE STATE OF GEORGIA
IN THE SOUTH ATLANTIC REGION


1992 Landings for the state of florida east coast
IN THE SOUTH ATLANTIC REGION


1992 LANDINGS FOR THE STATE OF FLORIDA EAST COAST
IN THE SOUTH ATLANTIC REGION


1992 LANDINGS fOR THE STATE OF FLORIDA INLAND LAKES IN THE SOUTH ATLANTIC REGION


1992 LANDINGS FOR THE STATE OF FLORIDA WEST COAST
in the gulf region


1992 landings for the state of florida west coast in the gulf region


## 1992 LaNDings for the state of alabama <br> IN THE GUL.F REGION

|  | SPECIES $\quad \begin{aligned} & \text { : } \\ & \\ & \\ & \\ & \end{aligned}$ | $\begin{aligned} & \text { FROM O TO } 3 \\ & \text { THOUSAND I } \\ & \hline \text { POUNDS } \end{aligned}$ | $\begin{aligned} & \text { DISTANCE } \\ & 3 \text { MILES } \\ & \text { THOUSAND } \\ & \hline \text { DOLLARS } \end{aligned}$ | FROM | U.S.SHORES BETWEEN 3 AND THOUSAND POUNDS | $\begin{aligned} & 10.200 \text { MILES } \\ & \text { THOUSAND } \\ & \text { DOLLARS } \end{aligned}$ |  | HIGH SEAS OR OFF FOREIGN SHORES THOUSAND THOUSAND | $\begin{aligned} & : ~: ~ \\ & \vdots: \\ & \vdots: \\ & : ~ \end{aligned}$ | $\frac{\text { THOUSAND }}{\text { POUNDSS }}$ | $\begin{aligned} & \text { TOTAL } \\ & \text { THOUSAND } \\ & \text { DOLLARS } \end{aligned}$ | PR/LE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bluefish : | 17 | 3 | : |  |  | : |  | : | 17 | 3 | \$. 17 |
|  | Croaker : | 18 | 6 | : | 1 | 1 | : | . | : | 19 | 7 | \$.36 |
|  | F1-A./Gulf: | 91. | 110 | : | 80 | 65 | : |  | : : | 171 | 175 | \$1.02 |
|  | Groupers : |  |  | : | 43 | 89 | : |  | : | 43 | 89 | \$2.06 |
|  | Mckr 1-King/Cero: |  |  | : | 9 | 6 | : |  | : | 9 | 6 | \$.66 |
|  | Mullet-(B.8S.) : | (. 1,279 | 828 | : |  | , | : |  | : | 1.279 | 828 | \$.64 |
|  | Sea Trout-White: | 72 | 34 | : | 49 | 22 | : |  | : | 121 | 56 | \$. 46 |
|  | Snapper-Red : |  |  | : | 62 | 138 | : |  | : | 62 | 138 | \$2.22 |
|  | Snapper-0ther : |  |  | : | 19 | 33 | : |  | : : | 19 | 33 | \$1.73 |
| 4 | Mackerel-Span : | 146 | 41 | : | 1 | 1 | : |  | $\therefore:$ | 147 | 42 | \$. 28 |
|  | Swordfish : | . |  | : | 1 | 5 | : |  | : | 1 | 5. | \$5.00 |
|  | Tilefish |  |  | : | 47 | 53 | : |  | : | 47 | 53 | \$1. 12 |
|  | Tuna-yellowfin: | - |  | : | 6 | 14. | : |  | : | 6 | 14 | \$2.33 |
|  | Tuna-Unclass. : |  |  | : | 2 | 3 | : |  | : | 2 | 3 | \$1.50 |
|  | Fish-Marine-0. : | 2,872 | 356 | : | . 634 | 357 | : |  | : : | 3,506 | 713 | 5.20 |
|  | TOTAL FISH | 4,495 | 1,378 | : | 954 | 787 | : |  | : | 5,449 | 2,165 | **** |
|  | Crab-Blue-Hard : | 3,531 | 1.461. | : |  |  | : |  | : | 3,531 | 1.461 | \$.44 |
|  | Shrimps-A. : | 4.735 | 9,096 | : | 8,764 | 21.084 | : |  | : | 13,499 | 30, 180 | \$2.23 |
|  | Oyster-Meats-A.: | 1.197 | 1.722 | : | $\cdots$ |  | : |  | : | 1, 197 | 1,722 | \$1.43 |
|  | Squid-Illex : | 3 | 2 | : | 1 | 1 | : |  | : : | 4 | 3 | \$.75 |

1992 LANOINGS FOR THE STATE OF ALABAMA
IN THE GULF REGION


1992 LANDINGS FOR THE STATE OF MISSISSIPPI
In the gulf region


1992 LANDINGS FOR THE STATE OF MISSISSIPPI
IN THE GULF REGION

| SPECIES | DISTANCE FROM O TO 3 MILES THOUSAND THOUSAND | FROM | U.S.SHORES <br> BETWEEN 3 AND 200 MILE'S' $\frac{\text { THOUSAND }}{\text { THOUSAND }}$ | HIGH SEAS OR OFF FOREIGN SHORES THOUSAND THOUSAND POUNDS | $\begin{aligned} & \text { : : } \\ & \text { : } \\ & : \text { : } \end{aligned}$ | $\frac{\text { THOUSAND }}{\text { POUNDS }}$ | $\begin{aligned} & \text { TOTAL } \\ & \text { THOUSAND } \\ & \hline \text { DOLLARS } \end{aligned}$ | PR/LB |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Oyster-Meats-A.: | 708808 | : |  |  | : | 708 | 808. | \$1.14 |
| Squid-Illex : | 1 (1) | : |  |  | : | 1 |  | $\bigcirc .00$ |
| Shellfish-Other: |  | : | 1 1 |  | : | 1 | 1 | \$1.00 |
| TOTAL SHELLFISH: <br>  | 6,353 9,658 | : | 4.949 11,197 |  | : | 11.302 | $\begin{gathered} 20,855 \\ * * * * * * * * * \end{gathered}$ | ***** |
| GRAND TOTAL : | 163,812 18,059 | : | 23,822 13,289 |  | : | 187.634 | 31,348 |  |

(1) VALUE LESS THAN $\$ 500$

1992 LANDINGS FOR THE STATE OF LOUISIANA IN THE GULF REGION


FISHERIE STATISTICS DIVISION

1992 LANDINGS FOR THE STATE OF LOUISIANA

(1) value less than $\$ 500$


1992 LANDINGS FOR THE STATE OF TEXAS
IN THE GULF REGION

| SPECIES | $\begin{aligned} & \text { FROM O TO } \\ & \text { THOUSAND } \\ & \hline \text { POUNDS } \end{aligned}$ | DISTANCE 3 MILES THOUSAND DDLLARS | FROM | U.S.SHORES BETWEEN 3 AN THOUSAND | ND 200 MILES THOUSAND | HIGH SEAS OR OFF FOREIGN SHORES $\frac{\text { THOUSAND THDUSAND }}{\text { POUNDS }}$ |  | $\begin{aligned} & \text { THOUSAND } \\ & \text { POUNDS } \end{aligned}$ | total THOUSANO | PR/LB |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Crab-Other | 156 | 121 | : | 2 | 1 |  |  | 158 | 122 | \$.77 |
| Shrimps-A. | 19,787 | 25.828 | : | 65,281 | 141,406 |  | : | 85,068 | 167,234 | \$1.96 |
| Oyster-Meats-A.: | 2,065 | 5,354 | : |  |  |  |  | 2.065 | 5,354. | \$2.59 |
| Shellfish-other: |  |  | : | 6 | 3 |  | : | 6 | 3 | \$.50 |
| TOTAL SHELLFISH: | 26,749 | 33,423 | : | 65,292 | 141,411 |  | : | 92,041 | 174.834 |  |
| GRAND TOTAL | 27,687 | 34,451 | . | 68,438 | 146,902 |  | : | 96., 125 | 181,353. |  |

THE NATIONAL MARINE FISHERIES SERVICE ESTIMATED THE DISTANCE FROM SHORE
FOR TEXAS LANDINGS DATA COLLECTED BY THE TEXAS PARKS AND WILDLIFE DEPART.

8

1992 LANDINGS FOR THE SOUTH ATLANTIC REGION


1992 Landings for the south atlantic region


1992 . landings for the south atlantic region

(1) Value Less than $\$ 500$

1992 Landings for the gulf region

| Species | FROM O TO $\frac{\text { THOUSAND }}{\text { POUNDS }}$ | $\begin{aligned} & \text { DISTANCE } \\ & \text { 3 MILES } \\ & \frac{\text { THOUSND }}{\text { DOLLARS }} \end{aligned}$ | fROM | U. S. Shores BETWEEN 3 AN THOUSAND pounds | $\begin{gathered} \text { NO } 200 \text { MILES } \\ \frac{\text { THOUSAND }}{\text { DOLLARS }} \\ \text { Din } \end{gathered}$ |  | HIGH SEAS OR OFF $\frac{\text { THOUSAND }}{\text { POUNDS }} \frac{\text { THOUSAND }}{\text { DOLLARS }}$ |  | THOUSAND | total THOUSAND | PR/LE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alewives | 19 | 2 | : |  | ! |  |  | : | 19 | 2 | \$. 10 |
| Bluefish | 269 | 74 |  | 27 | 6 : |  |  | : | 296 | 80 | 5.27 |
| Banito | 347 | 91 | : | 212 | 56 |  |  | : | 559 | 147 | \$.26 |
| Butterfish |  |  | : | 1 | (1) |  |  | : | 1 |  | \$.00 |
| Croaker | 95 | 47 | : | 2 | 1 : |  |  | : | 97 | 48 | 5.49 |
| cusk |  |  |  |  |  |  |  | : |  |  | \$.00 |
| Fi-Fluke | 146 | 170 |  |  |  |  |  | : | 146 | 170 | \$1. 16 |
| Fl-A./Gulf | 1.044 | 1.291 | : | 164 | 170 |  |  | : | 1,208 | 1.461 | \$1.20 |
| Groupers | 160 | 315 |  | 8,618 | 16,716 |  |  | : | 8.778 | 17,031 | \$1.94 |
| Hake-white |  |  |  |  |  |  |  | : |  |  | 8.00 |
| Mckri-king/Cero: | 302 | 283 |  | 1.614 | 1.507 |  |  | : | 1,916 | 1,790 | \$.93 |
| Menhaden | 521:403 | 27.619 | : | 274.186 | 13,894 |  |  | : | 795,589 | 41.513 | \$.05 |
| Mullet-(B.85.) | 19.055 | 8.161 |  | 13 | : |  |  | : | 19,068 | 8,163 | \$.42 |
| Scup or Porgy | 33 | 29 |  | 462 | 409 : |  |  | : | 495 | 438 | 5.88 |
| Sea Bass-Bk.-A. | 72 | 37 |  | 286 | 149 |  |  | : | 358 | 186 | \$.51 |
| Sea Trout-Spot | 1,550 | 1.758 |  |  |  |  |  | : | 1.550 | 1,758 | \$1.13 |
| Sea Trout-white: | 197 | 112 | : | 83 | 42 |  |  | : | 280 | 154 | \$.55 |
| Sharks-Une | 549 | 213 |  | 5.776 | 2,380 |  |  | : | 6,325 | 2,593 | 5.40 |
| Snapper-Red | 1 | 1 |  | 3.228 | 6,378 |  |  | : | 3,229 | 6.379 | \$1.97 |

1992 Landings for the gulf region

:992 LANDINGS FOR THE GULF REGIDN

(1) Value less than $\$ 500$

THE NATIONAL MARINE FISHERIES SERVICE ESTIMATED THE DISTANCE FROM SHORE FOR TEXAS LANDINGS DATA COLLEGTES GY THE TEXAS PARKS AND WILDLIFE DEPART

## 1992 STATISTICAL HIGHLIGHTS SOUTHEASTERN REGION

## COMMERCIAL FISHERIES

A. Total Landings
1.63 billion pounds (round weight) valued at 786 million dollars - ex-vessel value

- Of 1.63 billion pounds
1.22 billion pounds were fish
0.41 billion pounds were shellfish
- Of 1.63 billion pounds
0.77 billion pounds for food
0.86 billion pounds for industrial purposes
B. Catch by Distance from Shore

| $\frac{\text { Distance }}{\text { Miles }}$ | Billion pounds | $\underline{\$}$ |
| :---: | :---: | :---: |
| 0-3. | 1.1 | 69.5 |
| 3-200 | 0.50 | 30.5 |

C. Landings by Major Species

| SPECIES | 1992 |  |
| :---: | :---: | :---: |
|  | THOUSAND | THOUSAND DOLLARS |
| GROUPERS | 10,992 | \$21,574 |
| SNAPPERS | 9,420 | \$17,959 |
| King mackerel | 4,455 | \$5,684 |
| SPANISH MACKERE | L. 3,311 | \$932 |
| MENHADEN | 856,062 | \$43,516 |
| SHARKS | 19,286 | \$5,915 |
| SWORDFISH | 3,097 | \$11,326 |
| TUNA | 12,278 | \$25,682 |
| OYSTERS | 19,490 | \$44,668 |
| SHRIMP | 246,771 | \$440,229 |
| SPINY LOBSTER | 3,951 | \$14,611 |
| STONE CRAB | 4,756 | \$10,809 |

Note: Landings of fish, lobster and shrimp in live weight; oysters in meat weight.

## MARINE RECREATTONAL FISHERIES

Atlantic \& Gulf $\quad-290.1$ million fish* - 140.5 million pounds**
Southeast
(South Atlantic \& Gulf)

- 187.2 million fish*
- 85.9 million pounds**


## MAJOR SPECIES:

## Spotted Seatrout

Scalled Sardine
Pinfish
Hardhead Catfish
Red Drum
Atlantic Croaker
Sheepshead
White Grunt
Gray Snapper Spanish Mackerel
Stripped Mullet
Black sea bass
Spot
Crevalle Jack
Sand Seatrout
Ladyfish
Bluctish
Red grouper
Round scad
Atlantic thread herring
Pigfish
Blue runner
False pilchard
Gafftopsail catfish
Southern kingfish
Sand Perch
Yellowtail Snapper
Grunts
Dolphin
King Mackerel
Snook
Southern Flounder
Gag grouper
Black Drum

* Total number of fish caught
**Estimated weight of catch available for identification(Type A)
Source: Preliminary Marine Recreational Fishery Statistics Survey, Atlantic and Guif Coasts, 1993. Current Fisheries Statistics, National Marine Fisheries Service, NOAA, DOC, Silver Spring, MD.

TABLE 1. PUERTO RICO LANDINGS BY SPECIES FOR 1992.

| Species | Total Pounds | Total value | Weighted Price/lb |
| :---: | :---: | :---: | :---: |
| Tuna | 70,026 | \$ 89,633. | \$ 1.28 |
| Ballyhoo | 25,109 | 27,369 | 1.09 |
| Grunt | 117,456 | 155,660 | 1.36 |
| Hogfish | 21,218 | 40,314 | 1.90 |
| Croaker | 0 | 0 | 0.00 |
| Trunkfish | 40,066 | 61,301 | 1.53 |
| Dolphin | 85,260 | 136,416 | 1.60 |
| Swordfish | 0 | 0 | 0.00 |
| Squirrelfish | 6,040 | 7.490 | 1.24 |
| Mullet | 25,925 | 31,110 | 1.20 |
| Jack | 28,276 | 35,911 | 1.27 |
| Parrotfish | 92,136 | 124,394 | 1.35 |
| Marlin | 5,098 | 6,882 | 1.35 |
| Amberjack | 932 | 429 | 0.46 |
| Grouper | 75,835 | 136,503 | 1.80 |
| Red Hind | 42,015 | 72,266 | 1.72 |
| Nassau | 6,611 | 10,776 | 1.63 |
| Mojarra | 19,898 | 27,459 | 1.38 |
| Snapper |  |  |  |
| Lane | 91,055 | 169,362 | 1.86 |
| Yellowtail | 149,121 | 275,874 | 1.85 |
| silk | 208,085 | 476,515 | 2.29 |
| Mutton | 32,538 | 62,473 | 1.92 |
| Other Snapper | 51,623 | 98,083 | 1.90 |
| Triggerfish | 27,715 | 39,078 | 1.41 |
| Barracuda | 10,012 | 13,016 | 1.30 |
| Porgy | 10,051 | 13,770 | 1.37 |
| Snook | 28,982 | 41,154 | 1.42 |
| Tarpon | 3,175 | 2,476 | 0.78 |
| Goatfish | 7,480 | 12,641 | 1.69 |
| Sardine | 18,392 | 20,783 | 1.13 |
| Mackerel | 69,944 | 119,604 | 1.71. |
| Shark | 35,447 | 48,562 | 1.37 |
| Margate | 968 | 1,249 | 1.29 |
| Classified |  |  |  |
| First Class | 164,841 | 263,746 | 1.60 |
| second Class | 94,547 | 80,365 | 0.85 |
| Third Class | 37,822 | 37,066 | 0.98 |
| Trash | 5,382 | 1,722 | 0.32 |
| Other Fish | 66,868 | 0 | 0.00 |
| Total fish | 1,775,949 | 2,741,452 | 1.54 |
| Queen Conch | 90,947 | 200,993 | 2.21 |
| Land Crab | 2,640 | 21,410 | 8.11 |
| Lobster | 160,651 | 783,977 | 4.88 |
| Oysters | 202 | 760 | 3.76 |
| Octopus | 12,754 | 29.844 | 2.34 |
| Other Shellfish | 1.064 | 3,426 | 3.22 |
| Total Shellfish | 268,258 | 1,040,410 | 3.88 |
| Total | 2,044,207 | 3,781,862 | 1.85 |

1992 LANDINGS FOR THE UNITED STATES


1992 LaNDINGS FOR THE UNITED STATES


1992 LANDINGS FOR THE UNITED STATES


1992 LANDINGS FDR THE UNITED STATES


1992 LANDINGS FOR THE UNITED STATES

(1) VALUE LESS THAN $\$ 500$

THE NATIONAL MARINE FISHERIES SERVICE ESTIMATED THE DISTANCE FROM SHORE for texas landings data collected by the texas parks and hildlife depart.

## Statistical Highlights <br> Fisheries of the United States, 1992 <br> prepared by NMFS Fisheries Statistics Division

## U.S. COMMERCIAL FISHERIES

World-wide catch by U.S. Vessels (1):
10.2 billion pounds ( 4.6 million metric tons) round weight

Valued at $\$ 3.9$ billion - exvessel value
U.S. Landings in the 50 United States (2):
9.6 billion pounds ( 4.4 million metric tons) round weight

Valued at $\$ 3.7$. billion
Of 9.6 billion pounds:
8.1 billion pounds ( 3.7 million metric tons) of finfish
1.5 billion pounds ( 663,700 metric tons) of shellfish

Of 9.6 billion pounds:
7.6 billion pounds ( 3.5 million metric tons) for food
2.0 billion pounds ( 915,800 metric tons) for industrial purposes (including bait and animal food)

Total supply (landings + imports) of edible fishery products:
13.2 billion pounds ( 6.0 million metric tons) round weight
7.6 billion pounds ( 3.4 million metric tons) domestic production 5.6 billion pounds ( 2.6 million metric tons) imported ( 42 percent)

Per capita consumption: 14.8 pounds ( 6.7 kilograms) edible meat

## FOREIGN TRADE

Imports - edible
2.9 billion pounds ( 1.3 million metric tons) product weight Valued at $\$ 5.7$ billion

Exports - edible
2.1 billion pounds ( 946,900 metric tons) product weight Valued at $\$ 3.5$ billion

## CATCH IN THE EEZ

Total - 6.2 billion pounds ( 2.8 million metric tons)
No foreign catch took place in the U.S. EEZ for 1992.

## U. S. CATCH BY DISTANCE FROM SHORE (1)

| Distance | Billion <br> pounds | Million <br> mt | Percent | Billion <br> dollars | Percent |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 0-3 miles | 3.5 | 1.6 | 38 | 1.7 | 42 |
| 3-200 miles | 6.2 | 2.8 | 57 | 2.0 | 52 |
| International | 0.5 | 0.2 | 5 | 0.2 | 6 |
| TOTAL | 10.2 | 4.6 | 100 | 3.9 | 100 |

## U.S. DOMESTIC LANDINGS

$\left.\begin{array}{clccr}\text { Bank } & \text { Volume } & \text { Percent } & & \text { Value } \\ \text { Percent } \\ 1 & \text { AK Pollock } & 31 & & \text { Salmon }\end{array}\right) 16$

## WORLD FISHERIES (Live weight, 1991)

Total catch 213.7 billion pounds ( 96.9 million metric tons)
U.S. catch $\quad 12.1$ billion pounds ( 5.5 million metric tons) (including weight of mollusk shells)
U.S. catch is 5.6 percent of world catch

## COMMERCIAL EISHERIES CONTRIBUTION TO GNP

U.S. consumers spent an estimated $\$ 35.1$ billion for fishery products.

In producing and marketing these items, the commercial fishing industry contributed $\$ 18.5$ billion in value added to the U.S. GNP.

## MARINE RECREATIONAL FISHERIES

U.S. total fishermen Expenditures for fishing

Major species:

| Drums | Bluefish |
| :--- | :--- |
| Herring | Mackerels / Tunas |
| Porgies | Sea basses |
| Flounders | Mullets |

Herring
Porgies
Flounders

17 million
$\$ 7.2$ billion dollars

Bluefish
Mackerels / Tunas
Sea basses
Mullets

1992 Atlantic coast catch: 285.5 million pounds (does not include Alaska, Hawaii, and Pacific)
FOOTNOTES
(1) Catch data includes all catches by U.S.-flag vessels which are landed in the continental United States and Hawaii, Puerto Rico and other foreign ports; and catches transferred to internal water processing vessels (IWPs) in U.S. waters.
(2) Commercial landings by U.S. fishermen at ports in the 50 United States, excluding catches by U.S.-flag vessels which are landed in Puerto Rico and other foreign ports, and catches trans-: ferred to internal water processing vessels (IWPs) in U.S. waters.

For further information contact:
Fisheries Statistics Division
National Marine Fisheries Service
1335 East West Highway Room 8313
Silver Spring, MD 20910
(301) 713-2328

# EMPLOYMENT, CRAFT, AND PLANTS 

ESTIMATED NUMBER OF COMMERCIAL FISHING VESSELS (1) AND FISHING BOATS (2) BY REGION AND STATE, 1990-1991

|  | 1990 |  |  | 1991 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REGIONS | VESSELS | BOATS | TOTAL | VESSELS | BOATS | TOTAL |
| Northeast Fisheries: |  |  |  |  |  |  |
| connecticut.......... | 135 | 506 | 641 | 130 | 40 | 170 |
| Delaware.............. | 29 | 342 | 371 | 26 | 22 | 48 |
| Maine. . . . . . . . . . . . . . | 1,721 | 6,274 | 7,995 | 1,742 | 103 | 1,845 |
| Maryland (3)......... | 61 |  | 65 | 65 | - | 65 |
| Massachusetts........ | 921 | 4,654 | 5,575 | 878 | 170 | 1,048 |
| New Hampshire. . . . . . . | 122 | 447 | 569 | 134 | 9 | 143 |
| New Jersey........... | 427 | 1,450 | 1;877 | 447 | 73 | 520 |
| New York.............. | 513 | 3,696 | 4,209 | 602 | 55 | 657 |
| Rhode Island......... | 232 | 2,689 | 2,921 | 258 | 42 | 300 |
| Virginia (3)......... | 248 | 0 | 248 | 242 | 6 | 248 |
| South Atlantic and Gulf Fisheries: |  |  |  |  |  |  |
| North Carolina....... | 1,014 | 5,271 | 6,285 | 1,050 | 4,950 | 6,000 |
| South Carolina. | 470 | 1,140 | 1,610 | 370 | 946 | 1;316 |
| Georgia............... | 382 | 356 | 738 | 336 | 344 | . 680 |
| Florida............... | 2,500 | 4,800 | 7,300 | 2,394 | 6,609 | 9,003 |
| Alabama. . . . . . . . . . . . | 451 | 587 | 1,038 | 408 | 531 | 93.9 |
| Mississippi. . . . . . . . | 704 | 1,199 | 1,903 | 857 | 1,145 | 2,002 |
| Louistana............ | 3;628 | 9,113 | 12,741 | 3,840 | 9,786 | 13,626 |
| Texas. | 2,659 | 2,985 | 5,644 | 2,500 | 2,700 | 5,200 |
| West Coast Fisheries: |  |  |  |  |  |  |
| Washington........... | 2,609 | 2,627 | 5,236 | 2,609 | 2,627 | 5,236 |
| Oregon................. | 1,491 | 1,897 | 3,388 | 1,613 | 1,346 | 2,959 |
| Alaska................ | 7,063 | 10,352 | 17,415 | 7,416 | 10,164 | 17,580 |
| california........... | 3,675 | 2,921 | 6,596 | 3,556 | 3,136 | 6,692 |
| Havail................ | 190 | 1,200 | 1,390 | NA | NA | NA |
| Great Lakes |  |  |  |  |  |  |
| Fisheries: (4) |  |  |  |  |  |  |
| Illinods:............. | 5 | 0 | 5 |  | 0 | 5 |
| Indiana............... | 1 | 3 | . 4 |  | 0 | 10 |
| Michigan.............. | 60 | 79 | 139 | 62 | 74 | 136 |
| Minnesota. . . . . . . . . | 2 | 27 | 29 | 2 | 29 | 31 |
| New York. . . . . . . . . . . | 2 | 21 | 23 | 4 | 18 | 22 |
| Ondo.................. | 31 | 22 | 53 | 30 | 25 | 55 |
| Pennsylvania......... | 4 | 4 | 8 | NA | NA | NA : |
| Wisconsin. . . . . . . . . . | 84 | 26 | 110 | 86 | 33 | 119 |

(1) Vessels are documented craft greater than 5 net registered tons.
(2) Boats are craft less than 5 net registered tons.
(3) Only Federal collected data are available. Inshore data not available.
(4) Commercial fishing fleet sizes for the Great Lakes states represent only the number of licenses issued by the state; therefore, may not be an accurate total. Tribal data are not included in this table.
NA -- Not available.

## U.S. MARINE RECREATIONAL FISHERIES

DATA COLIECTION. While data on commercial fisheries hove been collected for many years. detalled stattstical information on marine recreational fishing is also required to support a variety of fishery management and development purposes. These include the objectives of the Magnuson fishery Conservation and Management Act, Public Law 94265, as amended. However, prior to 1979, the lack of a continuous or systematic collection of marine recreational fishery data had prevented the accomplishment of these goals. Therefore, NMFS began a comprehensive Marine Recreational Fishery Stattstical Survey (MRFSS) in 1979. Surveys have been conducted in the following areas and years:

Atlantic and Gulf. 1979 through 1992:
Pacific, mid-1979 through 1989;
Western Pacific, 1979 through 1981;
and Caribbean. 1979, 1981.
Prellminary estimates of catch and trips from the MRFSS for the Atlantlc and Gulf for 1992 are presented in the following tables. Summary graphs for 1987-1992 catch and trips are also shown. The survey is being conducted in 1993 along the coast of the entire continental United States except Washington State.

The MRFSS data collection consists of an intercept survey of recreational anglers in the field and an independent telephone survey of coastal county households. Each survey component contributes certain information that is combined to produce estimates of recreational catch, fishing effort, and participation. Estimates are calculated by subregion, state, species, fishing mode, and area of fishing. In addition, information on catch rates and measurements of fish lengths and weights are obtained.

The MRFSS is only one of several NMFS efforts to obtain data on recreational fisheries. Speclalized surveys on particular fisheries or to obtain socioeconomic data are also conducted by NMFS.

DATA TABLES. The total number of fish caught is presented for twenty commonly caught species groups on the Atlantic and Gulf coasts. Total number caught Includes those fish which were brought ashore in whole form and were avallable for identification, weighing. and measuring as well as those fish which were not
avallable for identification. This latter category includes those fish which were used for balt, disarded, filleted or released alive. Each species group may contain one or more species, genera, or familles.

Total catch is distributed by subregion, fishing area, and mode. The fishing areas are: ocean 3 milies or less from land, ocean more than 3 miles from land. and inland (sounds, tivers, bays). However, ocean data for the Gulf coast of Florida are reported as 10 miles or less from land and more than 10 miles from land. Fishing modes are; shore (man-made structures and beach/bank from previous surveys), party/charter boat, and prlvate/rental boat. In 1992 partyboats were not sampled by the MRFSS in the South Attantic and Gulf subregions: therefore estimated catches are presented for charterbcats only for these subreglons.

Trip estimates are presented for coastal residents (generally residing within 25 milles of the coast), non-coastal residents of the subregion and non-residents, by fishing mode.

The 1992 survey ald not include texas or the January and February period for Georgla, South Carolina and Attantic Coast states north of North Carolina. More detalled information will be ovallable in a separate MRFSS report to be published later.

PRELMINARY 1992 MRFSS DATA. The total Atlantic and Gulf Coast marine recreational finfish catch in 1992 was an estimated 285.5 million fish. These fish were taken on an estimated 52.1 million fishing trips. The harvest (excluding fish released alve) was estimated at 144.2 million fish weighing approximately 164.3 million pounds ( 74,525 metric tons).

Commonly caught specles, by number, in 1992 were herrings (primarlly used for bait), spotted seatrout, saltwater catfishes, summer flounder, pinfish, spot. bluefish, Attantic croaker, and black sea bass. Topranked specles in each subregion in 1992 were scup in the North Aflantic, spot in the Mid-Atlantic, and hemings In the South Attiantlic and Gulf of Mexico. The Guff (46 percent) and Mid-Atlantic ( 28 percent) subregions accounted for the highest numbers of Atlantic and Guff Coast fishes.

## U.S. MARINE RECREATIONAL FISHERIES

The Inland, ocean 3 miles or less from shore. and ocean 10 miles or lees from shore areas accounted for approximately 89 percent of the Atlantic and Gulf Coast catch by number. The remaining 11 percent of the catch from the Exclusive Economic Zone (EEZ). the principal area of NMFS management authority. However, for some specles (e.g., red snapper) over 80 percent of the catch was made in the EEZ.

As in 1991, about sixty-elght percent of the Atlantic. and Gulf Coast catch was taken in the private/rental boat mode in 1992. However, other
modes were important for particular spectes such as king mackerel from the charter boat mode and kingtishes and mullets from the shore mode. Overall, shore-mode catches were 25 percent of the total and: party/charter boat catches (excluding South Atlantic and Gulf partyboats) were 6 percent of the total.

Coastal residents accounted for 75 percent of the Attantic and Gulf trips made in 1992. Nonresidents accounted for an additional 22 percent of the trips. Total trips in the Soulth Atiantic exceeded all other subregions.


## U.S. MARINE RECREATIONAL FISHERIES

## ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL ANGLERS BY SPECIES GROUP AND SUBREGION: <br> ATLANTIC AND GULF COASTS, JAÑUARY 1992 - DECEMBER 1992

| $\begin{gathered} \text { Species } \\ \text { group } \end{gathered}$ | North Atlantic | $\begin{gathered} \text { Mid- } \\ \text { Atlantic } \end{gathered}$ | South Atilantic | Gulf of Mexico | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 3.723 |  |  |
| Herrings. | 1,365 | 665 | 3,723 | 21,236 | 26,989 |
| Saltwater catfishes.... |  | * ${ }^{*}{ }^{*}$ | 1,518 | 10,611 | 12,129 |
| Black sea bass.......... | 47 | 6,898 | 1,768 | 2,257 | 10,970 |
| Bluefish. | 3,144 | 5,384 | 2,551 | 501 | 11,581 |
| Red snapper | 5, *** | ${ }^{*}$ | 128 | 1,649 | 1,778 |
| Scup....... | 5,787 | 4,287 | 57 | - ${ }^{-}$ | 10,134 |
| Pinfish. |  |  | 3,570 | 8,378 | 11, 955 |
| sheepshead. . . . . . . . . . . |  | - | 1,500 | 4,054 | 5,564 |
| spotted seatrout. . . . . . |  | 59 | 2,153 | 18,188 | 20,400 |
| Weakfish................. | - | 1,487 | 194 | * | 1,695 |
| Sand seatrout | * |  | * | 3,243 | 3,243 |
| Spot. . . | * | 11,864 | 3,567 | 200 | 15,631 |
| Kingfishes |  | 505 | 1,869 | 1,142 | 3,517 |
| Atlantic croaker | * | 10,912 | 3,225 | 3,221 | 17,358 |
| Red drum | * | - | . 777 | 7,147 | 7,954 |
| Mullets. | * | 72 | 3,652 | 1,636 | 5,360 |
| King mackerel. | * |  | 811 | 446 | 1, 275 |
| Summer flounder | 462 | 11,670 | 415 | -- | 12,549 |
| Winter flound | 8, ${ }^{462}$ | 1,233 26,126 |  | 48, $027^{\text {\# }}$ | 1,674 103,739 |
| Other fishes | 8,262 | 26,126 | 21,323 | 48,027 | 103,739 |
| Total | $\therefore \times 19,522$ | $\because 81,226$ | $\because \sim$ 52,002 | 令 |  |

Note:- A dash ( - ) denotes an estimate of leas than thirty thousand which is included in row and column totals. an asterisk (*) denotes none reportec. Eigures for the Gulf of Maxico do not include the recreational catch for Texas. Flgures for the south atlantle and Gulf of Mexico do not include catches for partyboats. Row and column totele may hbt add due to rounding.

## ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL ANGLERS BY SPECIES GROUP AND FISHING MODE: <br> ATLANTIC AND GULF COASTS, JANUARY 1992 - DECEMBER 1992.



Note:- $A$ dash ( - ) denotes an estimate of lese than thirty thousand which is ineluded in row and column totalis. An asterisk (*) denotes none reported. Flgures for Charter Boats include only catches in the south atlantic and aulf of Mexico excluding Texas. Figures for Party/Charter Boats are only for the North Atlantic and Mid-Atiantic subregions. Row and column totals may not add due to rounding.

## U.S. MARINE RECREATIONAL FISHERIES

## ESTIMATED NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL ANGLERS BY SPECIES GROUP AND AREA OF FISHING: <br> ATLANTIC AND GULF COASTS, JANUARY 1992 - DECEMBER 1992

| Species group | Ocean |  |  |  | Inland | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3 Miles or less | Over 3 miles | 10 miles or less | Over <br> 10 Miles |  |  |
|  |  |  |  |  |  |  |
| Herrings........... | 2,539 | 174 | 4, 700 | 193 | 19,382 | 26,989 |
| Saltwater catfishe | 1,679 | 282 | 1,143 | 110 | 8,916 | .12,129 |
| Black sea bass... | 1,285 | 4,477 | 1,148 | 548 | 3,511 | 10,970 |
| Bluefish..... | 4,284 | 1,522 | - 248 | , - | 5,525 | 11,579 |
| Red snapper. | 176 | 1,275 | 118 | 172 | 37 | 1,778 |
| scup...... | 2,413 | 266 | * | * | 7,455 | 10,134 |
| Pinfish.... | 1,617 | 178 | 2,882 | 339 | 6,940 | 11,955 |
| Sheepshead..... | 432 | 64 | 481 | 48 | 4,538 | 5,564 |
| spotted seatrout | 2,088 | 643 | 2,926 | 175 | 14,567 | 20,400 |
| Weakfish.... | 153 | 118 |  | * | 1,423 | 1,695 |
| Sand seatrout | 649. | 140 | 238 | - | 2,196 | 3,223 |
| spor . . . . . . | 2,519 | 109 | - | - | 12,992 | 15,620 |
| Kingfisḩes...... | 1,533 | 81 | 439 | * | 1,463 | 3,517 |
| Atlantic croaker | 2,338 | 535 | 257 | - | 14,221 | 17,350 |
| Red drum. | 1,073 | 241 | 708 | 91 | 5,841 | 7,954 |
| Mullets...... | 800 | 49 | 259 | - | 4,245 | 5,353 |
| King mackerel... | 233 | 673 | 255 | 107 | - | 1,267 |
| Summer flounder. | 3,863 | 267 | , | , | 8,419 | 12,549 |
| Winter flounder. | 252 | 32 | * | * | 1,390 | 1,674 |
| Other fishes.. | 16,664 | 9,919 | 20,552 | 8,726 | 47,878 | 103,739 |
| Total | \% \% 6 , | \% \% 21.066 |  |  | \% | 265ing |

Note:-""Ocean 10 mi or less" and mocean over $10 \mathrm{mi} \mathrm{\prime}$ refer only to the Florida Gulf coast where state jurisdiction extends to three marine leagues, approximately ten nautical miles. The total estimate is additive across the four areas. A dash (-) denotes an estimite of less than thirty thousand which is included in row and colum totals. An asterisk (*) denotes none reported. Row and column totals may not add due to rounding. Figures do not include any recreational catches for texas or partyboat catches for the South atlantic and gulf of Mexico.

## U.S. MARINE RECREATIONAL FISHERIES

## ESTIMATED TOTAL NUMBER OF FISHING TRIPS BY MARINE RECREATIONAL ANGLERS BY SUBREGION AND AREA OF RESIDENCE: <br> ATLANTIC AND GULF COASTS, JANUARY 1992 - DECEMBER 1992



Note:-Estimates for the Gulf of Mexico exclude Texas. Estimates for the South Atlantle and Gulf of Maxico subregions exclude partyboat trips. Estimates also exclude January/February trips in the North Atlantlc subregion and in the South Aclantic states north of Florida, as well as November/December trips in the North Atlantic states north of Massachusetts.

## ESTIMATED TOTAL NUMBER OF FISHING TRIPS BY MARINE RECREATIONAL FISHERMEN BY SUBREGION AND MODE OF FISHING:

ATLANTIC AND GULF COASTS, JANUARY 1992 - DECEMBER 1992.

| Subregion | Shore | Charter Boats | Party/ Charter Boats | Private/ Rental Boats | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| North Atlantic Mid-Atlantic.. South Atlantic Gulf of Mexico |  |  |  |  |  |
| Total |  |  |  |  |  |

Note:-- A dash (-) denotes less than thirty thousand. However the number is included in row and column totals. An asterlsk (*) denotes none reported. Figures for Charter Boats include trips in the South Atlantic and Gulf of Mexico except for trips from Texas only. Figures for Party/Charter Boats are for the North and Mid-Atlantic subregions only. Row and column totals may not add due to rounding.


## MARINE RECREATIONAL FISHERIES CATCH ATLANTIC AND GULF COASTS, 1983-1992



## MARINE RECREATIONAL FISHING TRIPS ATLANTIC AND GULF COASTS, 1983-1992

Number of Angter Trips (Millions)


Note: 1992 data are provisional.


[^0]:    (1) VALUE LESS than $\$ 500$

